101 IELTS READING PAST PAPERS WITH ANSWERS

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Reading Test 1

Section 1

Andrea Palladio: Italian architect

A new exhibition celebrates Palladio's architecture 500years on

A. Vicenza is a pleasant, prosperous city in the Veneto, 60km west of Venice. Its grand families settled and farmed the area from the 16th century. But its principal claim to fame is Andrea Palladio, who is such an influential architect that a neoclassical style is known as Palladian. The city is a permanent exhibition of some of his finest buildings, and as he was born—in Padua, to be precise—500 years ago, the International Centre for the Study of Palladio's Architecture has an excellent excuse for mounting *la grande mostra,* the big show.

B. The exhibition has the special advantage of being held in one of Palladio's buildings, Palazzo Barbaran da Porto. Its bold facade is a mixture of rustication and decoration set between two rows of elegant columns. On the second floor the pediments are alternately curved or pointed, a Palladian trademark. The harmonious proportions of the atrium at the entrance lead through to a dramatic interior of fine fireplaces and painted ceilings. Palladio's design is simple, clear and not over-crowded. The show has been organised on the same principles, according to Howard Burns, the architectural historian who co-curated it.

C. Palladio's father was a miller who settled in Vicenza, where the young Andrea was apprenticed to a skilled stonemason. How did a humble miller's son become a world renowned architect? The answer in the exhibition is that, as a young man, Palladio excelled at carving decorative stonework on columns, doorways and fireplaces. He was plainly intelligent, and lucky enough to come across a rich patron, Gian Giorgio Trissino, a landowner and scholar, who organised his education, taking him to Rome in the 1540s, where he studied the masterpieces of classical Roman and Greek architecture and the work of other influential architects of the time, such as Donato Bramante and Raphael.

D. Burns argues that social mobility was also important. Entrepreneurs, prosperous from agriculture in the Veneto, commissioned the promising local architect to design their country villas and their urban mansions. In Venice the aristocracy were anxious to co-opt talented artists, and Palladio was

given the chance to design the buildings that have made him famous—the churches of San Giorgio Maggiore and the Redentore, both easy to admire because they can be seen from the city's historical centre across a stretch of water.

E. He tried his hand at bridges—his unbuilt version of the Rialto Bridge was decorated with the large pediment and columns of a temple —and, after a fire at the Ducal Palace, he offered an alternative design which bears an uncanny resemblance to the Banqueting House in Whitehall in London. Since it was designed by Inigo Jones, Palladio's first foreign disciple, this is not as surprising as it sounds.

F. Jones, who visited Italy in 1614, bought a trunk full of the master's architectural drawings; they passed through the hands of the Dukes of Burlington and Devonshire before settling at the Royal Institute of British Architects in 1894. Many are now on display at Palazzo Barbaran. What they show is how Palladio drew on the buildings of ancient Rome as models. The major theme of both his rural and urban building was temple architecture, with a strong pointed pediment supported by columns and approached by wide steps.

G. Palladio's work for rich landowners alienates unreconstructed critics on the Italian left, but among the papers in the show are designs for cheap housing in Venice. In the wider world, Palladio's reputation has been nurtured by a text he wrote and illustrated, "Quattro Libri dell' Architettura". His influence spread to St Petersburg and to Charlottesville in Virginia, where Thomas Jefferson commissioned a Palladian villa he called Monticello.

H. Vicenza's show contains detailed models of the major buildings and is leavened by portraits of Palladio's teachers and clients by Titian, Veronese and Tintoretto; the paintings of his Venetian buildings are all by Canaletto, no less. This is an uncompromising exhibition; many of the drawings are small and faint, and there are no sideshows for children, but the impact of harmonious lines and satisfying proportions is to impart in a viewer a feeling of benevolent calm. Palladio is history's most therapeutic architect.

I. "Palladio, 500 Anni: La Grande Mostra" is at Palazzo Barbaran da Porto, Vicenza, until January 6th 2009. The exhibition continues at the Royal Academy of Arts, London, from January 31st to April 13th, and travels afterwards to Barcelona and Madrid.

Questions 1-7

Do the following statements agree with the information given in Reading Passage 1? In boxes 1-7on your answer sheet write

True	*if the statement agree with the information*
False	*if the statement contradicts the information*
NOT GIVEN	*If there is no information on this*

1 The building where the exhibition is staged has been newly renovated

2 Palazzo Barbaran da Porto typically represent the Palladio’s design

3 Palladio’s father worked as an architect.

4 Palladio’s family refused to pay for his architectural studies

5 Palladio's alternative design for the Ducal Palace in Venice was based on an English building.

6 Palladio designed both wealthy and poor people

7 The exhibition includes paintings of people by famous artists

Questions 8-13

Answer the questions below

Choose NO MORE THAN THREE WORDS from the passage for each answer. Write your answers in boxes 8-13 on your answer sheet

8 What job was Palladio training for before he became an architect?

9 Who arranged Palladio's architectural studies?

10 Who was the first non-Italian architect influenced by Palladio?

11 What type of Ancient Roman buildings most heavily influenced Palladio's work?

12 What did Palladio write that strengthened his reputation?

13 In the writer's opinion, what feeling will visitors to the exhibition experience?

Section 2

You should spend about 20 minutes on Questions 14 -26 which are based on Reading Passage 2 below.

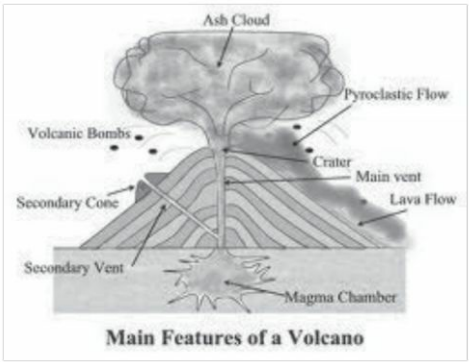
The future never dies?

The prospects for humanity and for the world as a whole are somewhere between glorious and dire. It is hard to be much more precise.

A. By 'glorious' I mean that our descendants - all who are born on to this Earth - could live very comfortably and securely, and could continue to do so for as long as the Earth can support life, which should be for a very long time indeed. We should at least be thinking in terms of the next million years. Furthermore, our descendants could continue to enjoy the company of other species - establishing a much better relationship with them than we have now. Other animals need not live in constant fear of us. Many of those fellow species now seem bound to become extinct, but a significant proportion could and should continue to live alongside US. Such a future may seem ideal, and so it is. Yet I do not believe it is fanciful. There is nothing in the physical fabric of the Earth or in our own biology to suggest that this is not possible.

B. 'Dire' means that we human beings could be in deep trouble within the next few centuries, living but also dying in large numbers in political terror and from starvation, while huge numbers of our fellow creatures would simply disappear, leaving only the ones that we find convenient -

chickens, cattle - or that we can't shake off, like flies and mice. I'm taking it to be self-evident that glory is preferable.



Main Features of a Volcano

C. Our future is not entirely in our own hands because the Earth has its own rules, is part of the solar system and is neither stable nor innately safe. Other planets in the solar system are quite beyond habitation, because their temperature is far too high or too low to be endured, and ours, too, in principle could tip either way. Even relatively unspectacular changes in the atmosphere could do the trick. The core of the Earth is hot, which in many ways is good for living creatures, but every now and again, the molten rock bursts through volcanoes on the surface. Among the biggest volcanic eruptions in recent memory was Mount St Helens, in the USA, which threw out a cubic kilometre of ash - fortunately in an area where very few people live. In 1815, Tambora (in present-day Indonesia) expelled so much ash into the upper atmosphere that climatic effects seriously harmed food production around the world for season after season. Entire civilisations have been destroyed by volcanoes.

D. Yet nothing we have so far experienced shows what volcanoes can really do. Yellowstone National Park in the USA occupies the caldera (the crater formed when a volcano collapses) of an exceedingly ancient volcano of extraordinary magnitude. Modem surveys show that its centre is now rising. Sometime in the next 200 million years, Yellowstone could erupt again, and when it does, the whole world will be transformed. Yellowstone could erupt tomorrow. But there's a very good chance that it will give US another million years, and that surely is enough to be going on with. It seems sensible to assume that this will be the case.

E. The universe at large is dangerous, too: in particular, we share the sky with vast numbers of asteroids, and every now and again, they come into our planet's atmosphere. An asteroid the size of a small island, hitting the Earth at 15,000 kilometres an hour (a relatively modest speed by the standards of heavenly bodies), would strike the ocean bed like a rock in a puddle, send a tidal wave around the world as high as a small mountain and as fast as a jumbo jet, and propel us into an ice age that could last for centuries. There are plans to head off such disasters (including rockets to push approaching asteroids into new trajectories), but in truth it's down to luck.

F. On the other hand, the archaeological and the fossil evidence shows that no truly devastating

asteroid has struck since the one that seems to have accounted for the extinction of the dinosaurs 65 million years ago. So again, there seems no immediate reason for despair. The Earth is indeed an uncertain place, in an uncertain universe, but with average luck, it should do us well enough. If the world does become inhospitable in the next few thousand or million years, then it will probably be our own fault. In short, despite the underlying uncertainty, our own future and that of our fellow creatures is very much in our own hands.

G. Given average luck on the geological and the cosmic scale, the difference between glory and disaster will be made, and is being made, by politics. Certain kinds of political systems and strategies would predispose US to long-term survival (and indeed to comfort and security and the pleasure of being alive), while others would take us more and more frenetically towards collapse. The broad point is, though, that we need to look at ourselves - humanity - and at the world in general in a quite new light. Our material problems are fundamentally those of biology. We need to think, and we need our politicians to think, biologically. Do that, and take the ideas seriously, and we are in with a chance. Ignore biology and we and our fellow creatures haven't a hope.

Questions 14-19

Do the following statements reflect the claims of the writer in Reading Passage 2? In boxes 14-19 on your answer sheet write

YES	*if the statement is true*
NO	*if the statement is false*
NOT GIVEN	*if the formation is not given to the passage*

14 It seems predictable that some species will disappear.

15 The nature of the Earth and human biology make it impossible for human beings to survive another million years,

16 An eruption by Yellowstone is likely to be more destructive than previous volcanic eruptions.

17 There 18 a greater chance of the Earth being hit by small asteroids than by large ones.

18 If the world becomes uninhabitable, It is most likely to be as a result of a natural disaster.

19 Politicians currently in power seem unlikely to change their way of thinking.

Questions 20-25

Complete the summary below.

*Choose **NO MORE THAN TWO WORDS** from the passage for each answer.*

Write your answers in boxes 20-25 cm your answer sheet

The Earth could become uninhabitable, like other planets, through a major change in the 20 .....Volcanic eruptions of 21..... can lead to shortages of 22.....in a wide area.

An asteroid hitting the Earth could create a 23.....that would result in a new

24.....Plans are being made to use 25.....to deflect asteroids heading for the Earth.

Question 26

Choose the correct letter. A, B, C or D.

Write your answer in box 26 on your answer sheet

What is the writer's purpose in Reading Passage 2?

A. to propose a new theory about the causes of natural disasters

B. to prove that generally held beliefs about the future are all mistaken

C. to present a range of opinions currently held by scientists

D. to argue the need for a general change in behavior

Section 3

Pottery production in ancient Akrotiri

A. Excavations at the site of prehistoric Akrotiri, on the coast of the Aegean Sea, have revealed much about the technical aspects of pottery manufacture, indisputably one of the basic industries of this Greek city. However, considerably less is known about the socio-economic context and the way production was organised.

B. The bulk of pottery found at Akrotiri is locally made, and dates from the late fifteenth century BC. It clearly fulfilled a vast range of the settlement's requirements: more than fifty different types of pots can be distinguished. The pottery found includes a wide variety of functional types like storage jars, smaller containers, pouring vessels, cooking pots, drinking vessels and so on, which all relate to specific activities and which would have been made and distributed with those activities in mind. Given the large number of shapes produced and the relatively high degree of standardisation, it has generally been assumed that most, if not all, of Akrotiri pottery was produced by specialised craftsmen in a non-domestic context. Unfortunately neither the potters' workshops nor kilns have been found within the excavated area. The reason may be that the ceramic workshops were located on the periphery of the site, which has not yet been excavated. In any event, the ubiquity of the pottery, and the consistent repetition of the same types in different sizes, suggest production on an industrial scale.

C. The Akrotirian potters seem to have responded to pressures beyond their households, namely to the increasing complexity of regional distribution and exchange systems. We can imagine them as full-time craftsmen working permanently in a high production-rate craft such as pottery manufacture, and supporting themselves entirely from the proceeds of then craft. In view of the above, one can begin to speak in terms of mass-produced pottery and the existence of organised

workshops of craftsmen during the period 1550—1500 BC. Yet, how pottery production was organised at Akrotiri remains an open question, as there is no real documentary evidence. Our entire knowledge comes from the ceramic material itself, and the tentative conclusions which can be drawn from it.

D. The invention of units of quantity and of a numerical system to count them was of capital importance for an exchange-geared society such as that of Akrotiri. In spite of the absence of any written records, the archaeological evidence reveals that concepts of measurements, both of weight and number, had been formulated. Standard measures may already have been in operation, such as those evidenced by a graduated series of lead weights— made in disc form—found at the site. The existence of units of capacity in Late Bronze Age times is also evidenced, by the notation of units of a liquid measure for wine on excavated containers.

E. It must be recognised that the function of pottery vessels plays a very important role in determining then characteristics. The intended function affects the choice of clay, the production technique, and the shape and the size of the pots. For example, large storage jars (pithoi) would be needed to store commodities, whereas smaller containers would be used for transport. In fact, the length of a man's arm limits the size of a smaller pot to a capacity of about twenty lines; that is also the maximum a man can comfortably carry.

F. The various sizes of container would thus represent standard quantities of a commodity, which is a fundamental element in the function of exchange. Akrotirian merchants handling a commodity such as wine would have been able to determine easily the amount of wine they were transporting fiom the number of containers they carried in then ships, since the capacity of each container was known to be 14-18 litres. (We could draw a parallel here with the current practice in Greece of selling oil in 17 kilogram tins.)

G. We may therefore assume that the shape, capacity, and, sometimes decoration of vessels are indicative of the commodity contained by them. Since individual transactions would normally involve different quantities of a given commodity, a range of 'standardised' types of vessel would be needed to meet traders' requirements.

H. In trying to reconstruct systems of capacity by measuring the volume of excavated pottery, a rather generous range of tolerances must be allowed. It seems possible that the potters of that time had specific sizes of vessel in mind, and tried to reproduce them using a specific type and amount of clay. However, it would be quite difficult for them to achieve the exact size required every time, without any mechanical means of regulating symmetry and wall thickness, and some potters would be more skilled than others. In addition, variations in the repetition of types and size may also occur because of unforeseen circumstances during the throwing process. For instance, instead of destroying the entire pot if the clay in the rim contained a piece of grit, a potter might produce a smaller pot by simply cutting off the rim. Even where there is no noticeable external difference between pots meant to contain the same quantity of a commodity, differences in their capacity can actually reach one or two litres. In one case the deviation from the required size appears to be as much as 10-20 percent.

I. The establishment of regular trade routes within the Aegean led to increased movement of goods; consequently a regular exchange of local, luxury and surplus goods, including metals, would have become feasible as a result of the advances in transport technology. The increased demand for standardised exchanges, inextricably linked to commercial transactions, might have been one of the main factors which led to the standardisation of pottery production. Thus, the whole network of

ceramic production and exchange would have depended on specific regional economic conditions, and would reflect the socio-economic structure of prehistoric Akrotiri.

Questions 27-28

Choose the correct letter, A, B. c or D.

27. What does die writer say about items of pottery excavated at Akrotiri?

A. There was very little duplication.

B. They would have met a big variety of needs.

C. Most of them had been imported from other places.

D. The intended purpose of each piece was unclear.

28. The assumption that pottery from Akrotiri was produced by specialists is partly ' based on

A. The discovery of kilns.

B. The central location of workshops.

C. The sophistication of decorative patterns.

D. The wide range of shapes represented.

Questions 29-32

Complete each sentence with the correct ending, A-F, below.

Write the correct letter, A-F.

29 The assumption that standard units of weight were in use could be based on

30 Evidence of the use of standard units of volume is provided by

31 The size of certain types of containers would have been restricted by

32 Attempts to identify the intended capacity of containers are complicated by

---

A. The discovery of a collection of metal discs.

B. The size and type of the sailing ships in use.

C. Variations in the exact shape and thickness of similar containers.

D. The physical characteristics of workmen.

E. Marks found on wine containers.

F. The variety of commodities for which they would have been used.

Questions 33-38

Do the following statements agree with the views of the writer in Reading Passage 3? Write

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

33. There are plans to excavate new areas of the archaeological site in the near future.

34. Some of the evidence concerning pottery production in ancient Akrotiri comes from written records.

35. Pots for transporting liquids would have held no more than about 20 litres.

36. It would have been hard for merchants to calculate how much wine was on their ships.

37. The capacity of containers intended to hold the same amounts differed by up to 20 percent.

38. Regular trading of goods around the Aegean would have led to the general standardisation of quantities.

Question 39-40

Choose the correct letter, A. B, C or D

39. What does the writer say about the standardisation of container sizes?

A. Containers which looked the same from the outside often varied in capacity.

B. The instruments used to control container size were unreliable.

C. The unsystematic use of different types of clay resulted in size variations.

D. Potters usually discarded containers which were of a non-standard size.

40. What is probably the main purpose of Reading Passage 3?

A. To evaluate the quality of pottery containers found in prehistoric Akrotiri.

B. To suggest how features of pottery production at Akrotiri reflected other developments in the region.

C. To outline the development of pottery-making skills in ancient Greece.

D. To describe methods for storing and transporting household goods in prehistoric societies.

Reading Test 2

Section 1

Save the Turtles

A. Leatherback turtles follow the general sea turtle body plan of having a large, flattened, round body with two pairs of very large flippers and a short tail. Like other sea turtles, the leatherback's flattened forelimbs are adapted for swimming in the open ocean. Claws are absent from both pairs of flippers. The Leatherback's flippers arc the largest in proportion to its body among extant sea turtles. Leatherback's front flippers can grow up to 2.7 meters (9 ft) in large specimens, the largest flippers (even in comparison to its body) of any sea turtle. As the last surviving member of its family, the leatherback turtle has several distinguishing characteristics that differentiate it from other sea turtles. Its most notable feature is that it lacks the bony carapace of the other extant sea turtles.

B. During the past month, four turtles have washed up along Irish coasts from Wexford to Kerry. These turtles arc more typical of warmer waters and only occur in Irish waters when they stray off course. It is likely that they may have originated from Florida, America. Two specimens have been taken to Coastal and Marine Resources Centre (stored at the National Maritime College), University College Cork, where a necropsy (post mortem for animals) will be conducted to establish their age, sex and their exact origin. During this same period, two leatherback turtles were found in Scotland, and a rare Kemp's Ridley turtle was found in Wales, thus making it an exceptional month for stranded turtles in Ireland and the UK.

C. Actually, There has been extensive research conducted regarding the sea turtles' abilities to return to their nesting regions and sometimes exact locations from hundreds of miles away. In the water, their path is greatly affected by powerful currents. Despite their limited vision, and lack of landmarks in the open water, turtles are able to retrace their migratory paths. Some explanations of this phenomenon have found that sea turtles can detect the angle and intensity of the earth's magnetic fields.

D. However, Loggerhead turtles are not normally found in Irish waters, because water temperatures here are far too cold for their survival. Instead, adult loggerheads prefer the warmers waters of the Mediterranean, the Caribbean and North America's east coast. The four turtles that were found have probably originated from the North American population of loggerheads. However it will require genetic analysis to confirm this assumption. It is thought that after leaving their nesting beach as hatchlings (when they measure 4.5 cm in length), these tiny turtles enter the North Atlantic Gyre (a giant circular ocean current) that takes them from America, across to Europe (Azores area), down towards North Africa, before being transported back again to America via a different current. This remarkable round trip may take many years during which these tiny turtles grow by several centimetres a year. Loggerheads may circulate around the North Atlantic several times before they settle in the coastal waters of Florida or the Caribbean.

E. These four turtles were probably on their way around the Atlantic when they strayed a bit too far north from the Gulf Stream. Once they did, their fate was sealed, as the cooler waters of the North East Atlantic are too cold for loggerheads (unlike leatherback turtles which have many anatomical and physiological adaptations to enable them to swim in our seas). Once in cool waters, the body of a loggerhead begins to shut down as they get 'cold stunned', then get hypothermia and die.

F. Leatherbacks are in immanent danger of extinction. A critical factor (among others) is the harvesting of eggs from nests. Valued as a food delicacy, Leatherback eggs are falsely touted to have aphrodisiacal properties in some cultures. The leatherback, unlike the Green Sea turtle, is not often killed for its meat; however, the increase in human populations coupled with the growing black market trade has escalated their egg depletion. Other critical factors causing the leatherbacks' decline are pollution such as plastics (leatherbacks eat this debris thinking it is jellyfish; fishing practices such as longline fishing and gill nets, and development on habitat areas. Scientists have estimated that there are only about 35,000 Leatherback turtles in the world.

G. We are often unable to understand the critical impact a species has on the environment—that is, until that species becomes extinct. Even if we do not know the role a creature plays in the health of the environment, past lessons have taught US enough to know that every animal and plant is one important link in the integral chain of nature. Some scientists now speculate that the Leatherback may play an important role in the recovery of diminishing fish populations. Since the Leatherback consumes its weight in jellyfish per day, it helps to keep Jellyfish populations in check. Jellyfish consume large quantities of fish larvae. The rapid decline in Leatherback populations over the last 50 years has been accompanied by a significant increase in jellyfish and a marked decrease in fish in our oceans. Saving sea turtles is an International endeavor.

Question 1-6

Choose the most suitable headings for paragraphs B-G from the list of headings below.
Write appropriate numbers (i-x) in boxes 1 -6 on your answer sheet.
NB There are more headings than paragraphs, so you will not use them all.

List of Headings

i. Sea turtles are found in unusual locations

ii. Unique features of the Leatherbacks

iii. The Leatherback's contribution

iv. Methods used for routes tracking

v. Predict the migration routes

vi. Remains multiplicity within the species

vii. The progress of hatching

viii. The fate of the lost turles

ix. How trips suppose to look like?

x. Factors leading to population decline

1. Paragraph B
2. Paragraph c
3. Paragraph D
4. Paragraph E
5. Paragraph F
6. Paragraph G

Question 7 -13

Choose words from the passage to answer the questions 7-13. Write NO MORE THAN THREE WORDS for each answer.

7. How many Leatherback turtles are there in the world?
8. What is the most noticeable difference between other sea turtles and leatherbacks?
9. What candle therback turtles to die in Irish waters?
10. Where did the four turtles probably come from?
11. By which means can sea turtles retrace their migratory paths?
12. For what purpose are Green Sea turtles killed by people?
13. What kind of species will benefits from a decline in Leatherback populations?

Section 2

Corporate Social Responsibility

*Broadly speaking, proponents of CSR have used four arguments to make their case: moral obligation, sustainability, license to operate, and reputation. The moral appeal—arguing that companies have a duty to be good citizens and to *do the right thing" —is prominent in the goal of Business for Social Responsibility, the leading nonprofit CSR business association in the United States. It asks that its members "achieve commercial success in ways that honor ethical values and respect people, communities, and the natural environment." Sustainability emphasizes environmental and community stewardship.*

A. An excellent definition was developed in the 1980s by Norwegian Prime Minister Gro Harlem Brundtland and used by the World Business Council for Sustainable Devebpment "Meeting the needs of the present without compromising the ability of future generations to meet their own needs." The notion of license to operate derives from the fact that every company needs tacit or explicit permission from governments, communities, and numerous other stakeholders to do business. Finally, reputation is used by many companies to justify CSR initiatives on the grounds that they will improve a company's image, strengthen its brand, enliven morale, and even raise the value of its stock.

B. To advance CSR, we must root it in a broad understanding of the interrelationship between a corporation and society while at the same time anchoring it in the strategies and activities of specific companies. To say broadly that business and society need each other might seem like a cliché, but it is also the basic truth that will pull companies out of the muddle that their current corporate-responsibility thinking has created Successful corporations need a healthy society. Education, health care, and equal opportunity are essential to a productive workforce. Safe products and working conditions not only attract customers but lower the internal costs of accidents. Efficient utilization of land, water, energy, and other natural resources makes business more productive. Good government, the rub of law, and property rights are essential for efficiency and innovation. Strong regulatory standards protect both consumers and competitive companies from exploitation. Ultimately, a healthy society creates expanding demand for business, as more human needs are met and aspirations grow. Any business that pursues its ends at the expense of the society in which it operates will find its success to be illusory and ultimately temporary. At the same time, a healthy society needs successful companies. No social program can rival the business sector when it comes to creating the jobs, wealth, and innovation that improve standards of living and social conditions over time.

C. A company's impact on society also changes over time, as social standards evolve and science progresses. Asbestos, now understood as a serious health risk, was thought to be safe in the early 1900s, given the scientific knowledge then available. Evidence of its risks gradually mounted for more than 50 years before any company was held liable for the harms it can cause. Many firms that failed to anticipate the consequences of this evolving body of research have been bankrupted by the results. No longer can companies be content to monitor only the obvious social impacts of today. Without a careful process for identifying evolving social effects of tomorrow, firms may risk their very survival.

D. No business can solve all of society's problems or bear the cost of doing so. Instead, each company must select issues that intersect with its particular business. Other social agendas are best left to those companies in other industries, NGOs, or government institutions that are better positioned to address them. The essential test that should guide CSR is not whether a cause is worthy but whether it presents an opportunity to create shared value— that is, a meaningful benefit for society that is also valuable to the business. However, Corporations are not responsible for all the world's problems, nor do they have the resources to solve them all Each company can identify the particular set of societal problems that it is best equipped to help resolve and from which it can gain the greatest competitive benefit. Addressing social issues by creating shared value will lead to self-sustaining

solutions that do not depend on private or government subsidies. When a well-run business applies its vast resources, expertise, and management talent to problems that it understands and in which it has a stake, it can have a greater impact on social good than any other institution or philanthropic organization.

E. The best corporate citizenship initiatives involve far more than writing a check: They specify clear, measurable goals and track results over time. A good example is GE's program to adopt underperforming public high schools near several of its major u.s. facilities. The company contributes between $250,000 and $1 million over a five-year period to each school and makes in-kind donations as well GE managers and employees take an active role by working with school administrators to assess needs and mentor or tutor students. In an independent study of ten schools in the program between 1989 and 1999, nearly all showed significant improvement, while the graduation rate in four of the five worst performing schools doubled from an average of 30% to 60%. Effective corporate citizenship initiatives such as this one create goodwill and improve relations with local governments and other important constituencies. What's more, GE's employees feel great pride in their participation. Their effect is inherently limited, however. No matter how beneficial the program is, it remains incidental to the company's business, and the direct effect on GE's recruiting and retention is modest.

F. Microsoft's Working Connections partnership with the American Association of Community Colleges (AACC) is a good example of a shared-value opportunity arising from investments in context. The shortage of information technology workers is a significant constraint on Microsoft's growth; currently, there are more than 450,000 unfilled IT positions in the United States alone. Community colleges, with an enrollment of 11.6 million students, representing 45% of all U.S. undergraduates, could be a major solution. Microsoft recognizes, however, that community colleges face special challenges: IT curricula are not standardized, technology used in classrooms is often outdated, and there are no systematic professional development programs to keep faculty up to date. Microsoft's $50 million five-year initiative was aimed at all three problems. In addition to contributing money and products, Microsoft sent employee volunteers to colleges to assess needs, contribute to curriculum development, and create faculty development institutes. Note that in this case, volunteers and assigned staff were able to use their core professional skills to address a social need, a far cry from typical volunteer programs. Microsoft has achieved results that have benefited many communities while having a direct—and potentially significant—impact on the company.

G. At the heart of any strategy is a unique value proposition: a set of needs a company can meet for its chosen customers that others cannot. The most strategic CSR occurs when a company adds a social dimension to its value proposition, making social impact integral to the overall strategy. Consider Whole Foods Market, whose value proposition is to sell organic, natural and healthy food products to customers who are passionate about food and the environment. The company's sourcing emphasizes purchases from local farmers through each store's procurement process. Buyers screen out foods containing any of nearly 100 common ingredients that the company considers unhealthy or environmentally damaging. The same standards apply to products made internally. Whole Foods' commitment to natural and environmentally friendly operating practices extends well beyond sourcing. Stores are constructed using a minimum of virgin raw materials. Recently, the company purchased renewable wind energy credits equal to 100% of its electricity use in all of its stores and facilities, the only Fortune 500 company to offset its electricity consumption entirely. Spoiled

produce and biodegradable waste are trucked to regional centers for composting. Whole Foods' vehicles are being converted to run on biofuels. Even the cleaning products used in its stores are environmentally friendly. And through its philanthropy, the company has created the Animal Compassion Foundation to develop more natural and humane ways of raising farm animals. In short, nearly every aspect of the company's value chain reinforces the social dimensions of its value proposition, distinguishing Whole Foods from its competitors.

From Harvard business review 2007

Questions 14-20

The reading passage has seven paragraphs, A-G

Choose the correct heading for paragraphs A-G from the list below. Write the correct number, i-xi, in boxes 14-20 on your answer sheet.

List of Headings

i. How CSR may help one business to expand

ii. CSR in many aspects of a company's business

iii. A CSR initiative without a financial gain

iv. Lack of action by the state of social issues

v. Drives or pressures motivate companies to address CSR

vi. the past illustrates business are responsible for future outcomes

vii. Companies applying CSR should be selective

viii. Reasons that business and society benefit each other

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14. Paragraph A
15. Paragraph B
16. Paragraph C
17. Paragraph D
18. Paragraph E
19. Paragraph F
20. Paragraph G

Questions 21-22

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 21-22 on your answer sheet.

The implement of CSR, HOW?

Promotion of CSR requires the understanding of interdependence between business and society.

Corporations workers' productivity generally needs health care, Education, and given 21.....Restrictions imposed by government and companies both protect consumers from being treated unfairly. Improvement of the safety standard can reduce the 22 .....of accidents in the workplace. Similarly society becomes pool of more human needs and aspirations.

Questions 23-26

Use the information in the passage to match the companies (listed A-C) with opinions or deeds below. Write the appropriate letters A, B or C in boxes 23-26 on your answer sheet.

List of companies

A. General Electronics
B. Microsoft
C. Whole foods market

NB: you may use any letter more than once

23. The disposable waste
24. The way company purchases as goods
25. Helping the undeveloped
26. ensuring the people have the latest information

Section 3

TV Addiction 2

A. Excessive cravings do not necessarily involve physical substances. Gambling can become compulsive; sex can become obsessive. One activity, however, stands out for its prominence and ubiquity—the world's most popular pastime, television. Most people admit to having a love-bate relationship with it. They complain about the "boob tube" and "couch potatoes," then they settle into their sofas and grab the remote control. Parents commonly fret about their children's viewing (if not their own). Even researchers who study TV for a living marvel at the medium's hold on them personally. Percy Tannenbaum of the University of California at Berkeley has written: "Among life's more embarrassing moments have been countless occasions when I am engaged in conversation in a room while a TV set is on, and I cannot for the life of me stop from periodically glancing over to the screen. This occurs not only during dull conversations but during reasonably interesting ones just as well."

B. Scientists have been studying the effects of television for decades, generally focusing on whether watching violence on TV correlates with being violent in real life. Less attention has been paid to the basic allure of the small screen—the medium, as opposed to the message.

C. The term "TV addiction" is imprecise and laden with value judgments, but it captures the essence of a very real phenomenon. Psychologists and psychiatrists formally define substance dependence as a disorder characterized by criteria that include spending a great deal of time using the substance; using it more often than one intends; thinking about reducing use or making repeated unsuccessful efforts to reduce use; giving up important social, family or occupational activities to use it; and reporting withdrawal symptoms when one stops using it.

D. All these criteria can apply to people who watch a lot of television. That does not mean that watching television, in itself, is problematic. Television can teach and amuse; it can reach aesthetic heights; it can provide much needed distraction and escape. The difficulty arises when people strongly sense that they ought not to watch as much as they do and yet find themselves strangely unable to reduce their viewing. Some knowledge of how the medium exerts its pull may help heavy viewers gain better control over their lives.

E. The amount of time people spend watching television is astonishing. On average, individuals in the industrialized world devote three hours a day to the pursuit—fully half of their leisure time, and more than on any single activity save work and sleep. At this rate, someone who lives to 75 would spend nine years in front of the tube. To some commentators, this devotion means simply that people enjoy TV and make a conscious decision to watch it. But if that is the whole story, why do so many people experience misgivings about how much they view? In Gallup polls in 1992 and 1999, two out of five adult respondents and seven out of 10 teenagers said they spent too much time watching TV. Other surveys have consistently shown that roughly 10 percent of adults call themselves TV addicts.

F. What is it about TV that has such a hold on US? In part, the attraction seems to spring from our biological 'orienting response.' First described by Ivan Pavlov in 1927, the orienting response is our instinctive visual or auditory reaction to any sudden or novel stimulus. It is part of our evolutionary heritage, a built-in sensitivity to movement and potential predatory threats.

G. In 1986 Byron Reeves of Stanford University, Esther Thorson of the University of Missouri and their colleagues began to study whether the simple formal features of television-cuts, edits, zooms, pans, sudden noises—activate the orienting response, thereby keeping attention on the screen. By watching how brain waves were affected by formal features, the researchers concluded that these stylistic tricks can indeed trigger involuntary responses and 'derive their attention-al value through the evolutionary significance of detecting movement.... It is the form, not the content, of television that is unique.'

H. The orienting response may partly explain common viewer remarks such as: "If a television is on, I just can't keep my eyes off it," "I don't want to watch as much as I do, but I can't help it," and "I feel hypnotized when I watch television." In the years since Reeves and Thorson published then

pioneering work, researchers have delved deeper. Annie Lang's research team at Indiana University has shown that heart rate decreases for four to six seconds after an orienting stimulus. In ads, action sequences and music videos, formal features frequently come at a rate of one per second, thus activating the orienting response continuously.

I. Lang and her colleagues have also investigated whether formal features affect people's memory of what they have seen. In one of their studies, participants watched a program and then filled out a score sheet. Increasing the frequency of edits (defined here as a change from one camera angle to another in the same visual scene) improved memory recognition, presumably because it focused attention on the screen. Increasing the frequency of cuts—changes to a new visual scene-had a similar effect but only up to a point. If the number of cuts exceeded 10 in two minutes, recognition dropped off sharply.

J. Producers of educational television for children have found that formal features can help learning. But increasing the rate of cuts and edits eventually overloads the brain. Music videos and commercials that use rapid intercutting of unrelated scenes are designed to hold attention more than they are to convey information. People may remember the name of the product or band, but the details of the ad itself float in one ear and out the other. The orienting response is overworked. Viewers still attend to the screen, but they feel tired and worn out, with little compensating psychological reward. Our ESM findings show much the same thing.

K. Sometimes the memory of the product is very subtle. Many ads today are deliberately oblique: they have an engaging story line, but it is hard to tell what they are trying to sell. Afterward you may not remember the product consciously. Yet advertisers believe that if they have gotten your attention, when you later go to the store you will feel better or more comfortable with a given product because you have a vague recollection of having heard of it.

You should spend about 20 minutes on question 27-40, which are based on reading passage 3 on the following pages.

Questions 27-30

Do the following statements agree with the claims of the writer in Reading Passage?

In boxes 27-30 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOTGIVEN	*if the information is not given in the passage*

27. Even researcher find sometimes it is more interesting in watching TV than talking with others in personal experience

28. Information medium as TV has always been the priority for scientific research.

29. It is partially unscientific to use the term 'TV addiction'.

30. Children do not know why they exercise too little.

Questions 31-33

Choose THREE letters, A-F.

Write the correct letters in boxes 31-33 on your answer sheet.

Which **THREE** of the following are benefits of watching TV?

A. artistic inspiration
B. family reunion
C. relieve stress
D. learn knowledge and education
E. work efficiency
F. ease communicative conflict

Questions 34-37

Look at the following researchers (Questions 34-37) and the list of statements below. Match each researcher with the correct statements.

Write the correct letter A-G in boxes 34-37 on your answer sheets.

34 Percy Tannenbaum

35 Ivan Pavlov

36 Byron Reeves and Esther Thorson

37 Annie Lang

List of Statements

A. It is the specific media formal characteristic that counts.

B. TV distraction shows human physical reaction to a new and prompted stimulus

C. Conveying information is the most important thing.

D. It is hard to ignore the effects of TV.

E. Whether people can remember deeper of the content relates with the format.

F. The heart rate remains stable when watching.

G. Clinically reliance on TV does not meet the criteria of an addiction.

Questions 38-40

Complete the following summary of the paragraphs of Reading Passage 1, using NO MORE THAN TWO WORDS from the Reading Passage for each answer.

Write your answers in boxes 38-40 on your answer sheet

TV is becoming a worldwide 38..... Some people love it and spend a great deal of time watching it. According to some surveys, a small group even claim themselves as 39..... One researcher believes that this attraction comes from our human instinct, described as 40.....which is built in part of our physiological evolution.

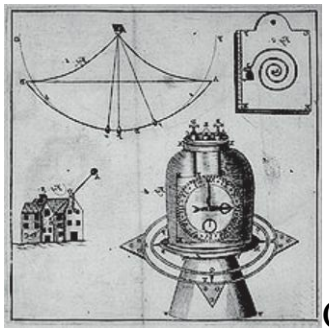
Reading Test 3

Section 1

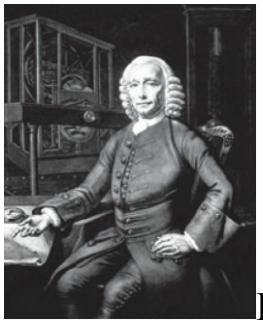
Timekeeper 2 Invention of Marine Chronometer

A. It was, as Dava Sobel has described a phenomenon: 'the greatest scientific problem of the age'. The reality was that in the 18th century no one had ever made a clock that could suffer the great rolling and pitching of a ship and the large changes in temperature whilst still keeping time accurately enough to be of any use. Indeed, most of the scientific community thought such clock impossibility. Knowing one's position on the earth requires two very simple but essential coordinates; rather like using a street map where one thinks in terms of how far one is up/down and how far side to side.

B. The longitude is a measure of how far around the world one has come from home and has no naturally occurring base line like the equator. The crew of a given ship was naturally only concerned with how far round they were from their own particular home base. Even when in the middle of the ocean, with no land in sight, knowing this longitude position is very simple in theory. The key to knowing how far around the world you are from home is to know, at that very moment, what time it is back home. A comparison with your local time (easily found by checking the position of the Sim) will then tell you the time difference between you and home, and thus how far round the Earth you are from home.



C. Up until the middle of the 18th century, navigators had been unable to determine their position at sea with accuracy and they faced the huge attendant risks of shipwreck or running out of supplies before reaching then destination. The angular position of Moon and other bright stars was recorded in three-hour intervals of *Greenwich Time.* In order to determine longitude, sailors had to measure the angle between Moon centre and a given star - lunar distance - together with height of both planets using the naval sextant. The sailors also had to calculate the Moon's position if seen form the centre of Earth. Time corresponding to *Greenwich Time* was determined using the nautical almanac. Then the difference between the obtained time and local time served for calculation in longitude from Greenwich. The great flaw in this 'simple' theory was - how does the sailor know time back home when he is in the middle of an ocean?

 D. The obvious and again simple answer is that he takes an accurate clock with him, which he sets to home time before leaving. All he has to do is keep it wound up and running, and he must never reset the hands throughout the voyage This clock then provides ‘home time’, so if, for example, it is midday on board your ship and your ‘home time’ clock says that at that same moment it is midnight at home, you know immediately there is a twelve hour time-difference and you must be exactly round the other side of the world, 180 degrees of longitude from home.

E. After 1714 when the British government offered the huge sum of £20,000 for a solution to the problem, with the prize to be administered by die splendidly titled Board of Longitude. The Government prize of £20,000 was the highest of three sums on offer for varying degrees of accuracy, the full prize only payable for a method that could find the longitude at sea within half a degree. If the solution was to be by timekeeper (and there were other methods since the prize was offered for any solution to the problem), then the timekeeping required to achieve this goal would have to be within 2.8 seconds a day, a performance considered impossible for any clock at sea and unthinkable for a watch, even under the very best conditions.

F. It was this prize, worth about £2 million today, which inspired the self-taught Yorkshfre carpenter, John Harrison, to attempt a design for a practical marine clock. During the latter part of his early career, he worked with his younger brother James. Their first major project was a revolutionary turret clock for the stables at Brocklesby Park, seat of the Pelham family. The clock was revolutionary because it required no lubrication. 18th century clock oils were uniformly poor and one of the major causes of failure in clocks of the period. Rather than concentrating on improvements to the oil, Harrison designed a clock which didn't need it. In 1730 Harrison created a description and drawings for a proposed marine clock to compete for the Longitude

Prize and went to London seeking financial assistance. He presented his ideas to Edmond Halley, the Astronomer Royal. Halley referred him to George Graham, the country's foremost clockmaker. He must have been impressed by Harrison, for Graham personally loaned Harrison money to build a model of his marine clock. It took Harrison five years to build Harrison Number One or HI. He demonstrated it to members of the Royal Society who spoke on his behalf to the Board of Longitude. The clock was the first proposal that the Board considered to be worthy of a sea trial. In 1736,

G. After several attempts to design a betterment of HI, Harrison believed that the ' solution to the longitude problem lay in an entirely different design. H4 is completely different from the other three timekeepers. It looks like a very large pocket watch. Harrison's son William set sail for the West Indies, with H4, aboard the ship Deptford on 18 November 1761. It was a remarkable achievement but it would be some time before the Board of Longitude was sufficiently satisfied to award Harrison the prize.

H. John Hadley, an English mathematician, developed sextant, who was a competitor of Harrison at that time for the luring prize. A sextant is an instrument used for measuring angles, for example

between the sun and the horizon, so that the position of a ship or aeroplane can be calculated. Making this measurement is known as sighting the object, shooting the object, or taking a sight and it is an essential part of celestial navigation. The angle, and the time when it was measured, can be used to calculate a position line on a nautical or aeronautical chart. A sextant can also be used to measure the Lunar distance between the moon and another celestial object (e.g., star, planet) in order to determine Greenwich time which is important because it can then be used to determine the longitude.

I. The majority within this next generation of chronometer pioneers were English, but the story is by no means wholly that of English achievement. One French name, Pierre Le Roy of Paris, stands out as a major presence in the early history of the chronometer. Another great name in the story is that of the Lancastrian, Thomas Eamshaw, a slightly younger contemporary of John Arnold's. It was Eamshaw who created the final form of chronometer escapement, the spring detent escapement, and finalized the format and the production system for the marine chronometer, making it truly an article of commerce, and a practical means of safer navigation at sea over the next century and half.

Questions 1-5

The reading Passage has ten paragraphs A-I.

Which paragraph contains the following information? Write the correct letter *A-I,* in boxes *1-5* on your answer sheet.

NB: you may use any letter more than once

1. introduction of a millman under awards

2. the definition of an important geographical term

3. a rival against Harrison's invention emerged

4. problems of sailor encountered in identifying the position on the sea

5. economic assist from another counterpart

Questions 6-8

Do the following statements agree with the information given in Reading Passage 1 In boxes 6-8 on your answer sheet, write

YES	*if the statement is true*
NO	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

6. It is with no great effort by sailors to calculate the position when in the center of the ocean theoretically.

7. To determine the longitude, a measurement of distance from moon to a given star is a must.

8. In theory, by calculating the longitude degrees covered by a sail journey, the distance between the

start and the end points can be obtained.

Questions 9-13

Summary

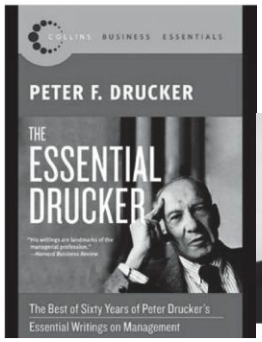
Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 9-13 on your answer sheet.

Hundred years ago, sailors tried to identify their time by checking the sun or stars, but the trouble was that they did need a reliable clock which showed time of.....9..... And the timekeeper required would be to precisely tell a tangible time lapse confined to.....10.....

An extraordinary craftsman, Harrison, once created a novel clock which did not rely on ...11.....to work properly. Later on, competitive mode of.....12.....was another prominent device designed by Hadley, which calculated angle between sun and the earth. Base on Harrison's effort, Earns haw eventually implement key components for.....13....., which had been used ever since.

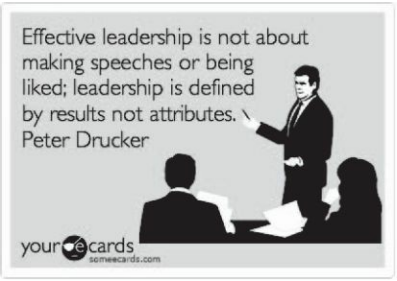
Section 2

Father of modern management


COLLINS BUSINESS ESSENTIALS
PETER F. DRUCKER
THE ESSENTIAL DRUCKER
The Best of Sixty Years of Peter Drucker's Essential Writings on Management

A. It's been said that Peter Drucker invented the discipline of management Before he wrote his first book on the topic, he knew of only two companies in the world with management development programs. Ten years after the book's publication, 3,000 companies were teaching the subject. Widely considered as the father of "modem management," he wrote 39 books and countless scholarly and popular articles exploring how humans are organized in all sectors of society—business, government and the nonprofit world. His writings have predicted many of the major developments of the late twentieth century, including privatization and decentralization; the rise of Japan to a world economic power; the decisive importance of marketing; and the emergence of the information society with its necessity of lifelong learning.

B. Drucker has said that writing is die foundation of everything he does. In 1937, he published his first book, which was written in Europe. The End of Economic Man: A Study of the New Totalitarianism examined the spiritual and social origins of fascism. In 1940, before the United States entered World War n, he wrote The Future of Industrial Man, in which he presented his social vision for the postwar world. In 1943, General Motors asked Drucker to study its management practices. Drucker accepted and spent 18 months researching and writing the 1945 book. Concept of the Corporation.


Effective leadership is not about making speeches or being liked; leadership is defined by results not attributes.
Peter Drucker
your ecards
someecards.com

C. The concepts Drucker introduced in the 1940s and 1950s have endured. In 1954, Drucker wrote his first book that taught people how to manage. Tided The Practice of Management, it introduced the concept of "management by objectives". Management by objectives require managers to establish goals for theft subordinates and devise means of measuring results. Workers are then left alone to perform as they will and measure theft performance. Drucker wrote, "It is not possible to be effective unless one first decides what one wants to accomplish. He went on to explain that every worker must be given the tools "to appraise himself, rather than be appraised and controlled from the outside. Management by objectives has become an accepted business concept and is probably Drucker's most important contribution. Drucker issued challenges to junior, middle and senior management: 'The very term "middle management" is becoming meaningless [as some] will have to learn how to work with people over whom they have no direct line control, to work transnationally, and to create, maintain, and run systems-none of which are traditionally middle management tasks. "It is top management that faces the challenge of setting directions for the enterprise, of managing the fundamentals.

D. Drucker interviewed executives and workers, visited plants, and attended board meetings. While the book focused on General Motors, Drucker went on to discuss the industrial corporation as a social institution and economic policy in the postwar era. He introduced previously unknown concepts such as cooperation between labor and management, decentralization of management, and viewing workers as resources rather than costs. Drucker saw people as a resource, and considered that they would be more able to satisfy customers if they had more involvement in then jobs and gained some satisfaction from doing them. Drucker claimed that an industrial society allows people to realize their dreams of personal achievement and equal opportunity-the need to manage business by balancing a variety of needs and goals, rather than subordinating an institution to a single value. This concept of management by objectives forms the keynote of his 1954 landmark The Practice of Management. He referred to decentralization as 'a system of local self government, in which central management tells division managers what to do, but not how to do it. The young executives are given the freedom to make decisions — and mistakes — and learn from the experience. Top leaders at General Motors disliked the book and discouraged their executives from reading it. Many other American executives criticized Concept for its challenge to management authority.

E. Drucker wasn't immune to criticism. The Wall Street Journal researched several of his lectures in 1987 and reported that he was sometimes loose with facts. Drucker was off the mark, for example, when he told an audience that English was the official language for all employees at Japan's Mitsui trading company. And he was known for his prescience. Given the recent involvement of the US government with financial companies, he was probably correct in his forecast when he anticipated, for instance, that the nation's financial center would shift from New York to Washington, others maintain that one of Drucker's core concepts—"management by objectives"—is flawed and has never really been proven to work effectively. Specifically, critics say that the system is difficult to implement, and that companies often wind up overemphasizing control, as opposed to fostering creativity, to meet their goals. Drucker didn't shy away from controversy, either.

F. Throughout his career, Drucker expanded his position that management was "a liberal art ″ and he infused his management advice with interdisciplinary lessons including history, sociology, psychology, philosophy, culture and religion. He also strongly believed that all institutions, including those in the private sector, had a responsibility for the whole society. "The fact is," Drucker wrote in 1973, "that in modem society there is no other leadership group but managers. If the managers of our major institutions, especially in business, do not take responsibility for the common good, no one else can or will." In his books, lectures and interviews, the emergence of knowledge workers is only one of the demographic changes Drucker warns businesses to prepare for. Others include a decreasing birth rate in developed countries, a shift in population from rural to urban centers, shifts in distribution of disposable income and global competitiveness. Drucker believes these changes will have a tremendous impact on business. Drucker held a profound skepticism of macroeconomic theory and contended that economists of all schools fail to explain significant aspects of modem economies. Business "gums" have come and gone during the last 50 years, but Drucker's message continues to inspire managers. During the 1990s, Drucker wrote about social, political and economic changes of the" postcapitalist" era, which he says are as profound as those of the industrial revolution. In Managing for the Future: The 1990s and Beyond (1992), Drucker discussed the emergence of the "knowledge worker" — whose resources include specialized learning or competency rather than land, labor or other forms of capital.

Questions 14-19

Reading Passage 2 has 6 paragraphs A-F. Choose die correct heading for paragraphs A-F from the list of headings below. Write the correct number: i-x, in boxes 14-19 on your answer sheet

List of Headings

i. Introducing new management concepts to postwar era

ii. Ideas that stood the test of time

iii. Early publications

iv. Shifting the focus of management in modem manufactures

v. Thinker and scholar with world-wide popularity

vi. Drucker's concepts are flawed

vii. The changing role of employees in management

viii. Find fault with Drucker

ix. Iconic view of "management by objectives"

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14. Paragraph A

15. Paragraph B

16. Paragraph c

17. Paragraph D

18. Paragraph E

19. Paragraph F

Questions20-23

Do the following statements agree with the information given in Reading Passage 2? In boxes 20-23 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

20. Drucker believed the employees should enjoy the same status as the employers in a company

21. middle management tasks will change since companies become more complicated and run business globally

22. Drucker strongly support that economists of schools have resources to explain the problems of modem economies at least in a macroeconomics scope

23. Drucker's ideas proposed half a century ago are out of date in modem days

Questions 24-25

Choose TWO letters from A-E.

*Write your answers in boxes 24 and 25 on your answer sheet. Which **TWO** of the following are true of Drucker's views?*

A. Managers should be responsible for the common good of the whole society.

B. Young executives should be given chances to start from low level jobs

C. More emphasis should be laid on fostering the development of the union.

D. Management should facilitate workers with tools of self-appraisal instead of controlling them from the outside.

E. management should go beyond an isolate discipline as to incorporate ideas with many subjects

Questions 26-27

Choose TWO letters from A-E.

Write your answers in boxes 26 and 27 on your answer sheet.

Which TWO of the following are mentioned in the passage as criticisms to Drucker and his views?

A. He did not show enough respect to Japanese employees when he said English was the official language for all employees at Japan's Mitsui trading company.

B. His lectures are too broad and lack of being precise and accurate about the facts,

C. His concepts helped corporate executives but not average workers.

D. His ideas are sometimes impractical and result in opposite outcomes.

E. He was overstating the case for knowledge workers when warning businesses to get prepared.

Section 3

Extinct: the Giant Deer

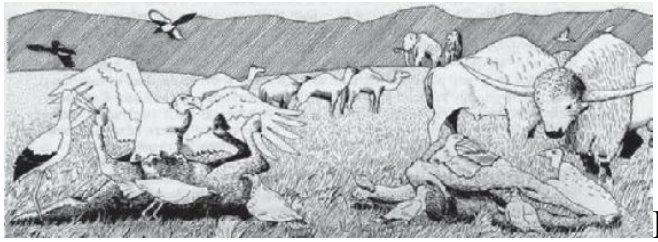
Toothed cats, mastodons, giant sloths, woolly rhinos, and many other big, shaggy mammals are widely thought to have died out around the end of the last ice age, some 10,500 years ago.

A. The Irish elk is also known as the giant deer (Megaloceros giganteus). Analysis of ancient bones and teeth by scientists based in Britain and Russia show the huge herbivore survived until about 5,000 B.C.—more than three millennia later than previously believed. The research team says this suggests additional factors, besides climate change, probably hastened the giant deer's eventual extinction. The factors could include hunting or habitat destruction by humans.

B. The Irish elk, so-called because its well-preserved remains are often found in lake sediments under peat bogs in Ireland, first appeared about 400,000 years ago in Europe and central Asia. Through a combination of radiocarbon dating of skeletal remains and the mapping of locations where the remains were unearthed, the team shows the Irish elk was widespread across Europe before the last "big freeze." The deer's range later contracted to the Ural Mountains, in modern-day Russia, which separate Europe from Asia.

C. The giant deer made its last stand in western Siberia, some 3,000 years after the ice sheets receded, said the study's co-author, Adrian Lister, professor of palaeobiology at University College London, England. "The eastern foothills of the Urals became very densely forested about 8,000 years ago, which could have pushed them on to the plain," he said. He added that pollen analysis indicates the region then became very dry in response to further climactic change, leading to the loss of important food plants. "In combination with human pressures, this could have finally snuffed them out," Lister said.

D. Hunting by humans has often been put forward as a contributory cause of extinctions of the Pleistocene mega fauna. The team, though, said their new date for the Irish elk's extinction hints at an additional human-made problem—habitat destruction. Lister said, "We haven't got just hunting 7,000 years ago—this was also about the time the first Neolithic people settled in the region. They were farmers who would have cleared the land." The presence of humans may help explain why the Irish elk was unable to tough out the latest of many climatic fluctuations—periods it had survived in the past.

 E. Meanwhile, Lister cast doubt on another possible explanation for the deer's demise—the male's huge antlers. Some scientists have suggested this exaggerated feature—the result of females preferring stags with the largest antlers, possibly because they advertised a male's fitness —contributed to the mammal's downfall. They say such antlers would have been a serious inconvenience in the dense forests that spread northward after the last ice age. But, Lister said, "That's a hard argument to make, because the deer previously survived perfectly well through wooded interglacials [warmer periods between ice ages]." Some research has suggested that a lack of sufficient high-quality forage caused the extinction of the elk. High amounts of calcium and phosphate compounds are required to form antlers, and therefore large quantities of these minerals are required for the massive structures of the Irish Elk. The males (and male deer in general) met this requirement partly from their bones, replenishing them from food plants after the antlers were grown or reclaiming the nutrients from discarded antlers (as has been observed in extant deer). Thus, in the antler growth phase. Giant Deer were suffering from a condition similar to osteoporosis. When the climate changed at the end of the last glacial period, the vegetation in the animal's habitat also changed towards species that presumably could not deliver sufficient amounts of the required minerals, at least in the western part of its range.

F. The extinction of megafauna around the world was almost completed by the end of the last ice age. It is believed that megafauna initially came into existence in response to glacial conditions and became extinct with the onset of warmer climates. Tropical and subtropical areas have experienced less radical climatic change. The most dramatic of these changes was the transformation of a vast area of north Africa into the world's largest desert. Significantly, Africa escaped major faunal extinction as did tropical and sub-tropical Asia. The human exodus from Africa and our entrance into the Americas and Australia were also accompanied by climate change. Australia's climate changed from cold-dry to warm-dry. As a result, surface water became scarce. Most inland lakes became completely dry or dry in the warmer seasons. Most large, predominantly browsing animals lost their habitat and retreated to a narrow band in eastern Australia, where there was permanent water and better vegetation. Some animals may have survived until about 7000 years ago. If people have been in Australia for up to 60 000 years, then megafauna must have co-existed with humans for at least 30 000 years. Regularly hunted modem kangaroos survived not only 10 000 years of Aboriginal hunting, but also an onslaught of commercial shooters.

G. The group of scientists led by A.J. Stuart focused on northern Eurasia, which he was taking as Europe, plus Siberia, essentially, where they 've got the best data that animals became extinct in Europe during the Late Pleistocene. Some cold-adapted animals, go through into the last part of the cold stage, and then become extinct up there. So you've actually got two phases of extinction. Now, neither of these coincide — these are Neanderthals here being replaced by modem humans. There's no obvious coincidence between the arrival of humans or climatic change alone and these extinctions. There's a climatic change here, so there's a double effect here. Again, as animals come through to the last part of the cold stage, here there's a fundamental change in the climate, reorganization of vegetation, and the combination of the climatic change and the presence of humans -- of advanced Paleolithic humans — causes this wave of extinction. There's a profound difference between the

North American data and that of Europe, which summarize that the extinctions in northern Eurasia, in Europe, are moderate and staggered, and in North America severe and sudden. And these things relate to the differences in the timing of human arrival. The extinctions follow from human predation, but only at times of fundamental changes in the environment.

Questions 28-32

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 28-32 on your answer sheet.

Having been preserved well in Europe and central Asia, the remains of the Irish elk was initially found approximately _____28____. Around _____29_____, they were driven to live in the plain after being restricted to the Ural Mountains. Hunting was considered as one of the important factors of Irish elk's extinction, people have not started hunting until_____30_____ when Irish elk used to get through under a variety of climatic fluctuations.

The huge antlers may possibly contribute to the reason why Irish elk extinct, which was highly controversial as they live pleasantly over the span of____31_____. Generally, it is well-known that, at the last maximum ice age, mammals become extinct about _____32_____.

Questions 33-35

Answer the questions below.

Choose *NO MORE THAN THREE WORDS AND/OR A NUMBER* from the passage for each answer.

33. What kind of physical characteristics eventually contributed to the extinction of Irish elk?

34. What kind of nutrient substance needed in maintaining the huge size of Irish elk?

35. What geographical evidence suggested the advent of human resulted in the extinction of Irish elk?

Questions36-39

Matching choose the letter A-D and fill in box 36-39

A. Eurasia
B. Australia
C. Asia
D. Africa

36 the continents where humans imposed little impact on large mammals extinction

37 the continents where the climatic change was mild and fauna remains

38 the continents where both humans and climatic change are the causes

39 the continents where the climatic change along caused a massive extinction

40. Which statement is true according the Stuart team's finding?

A. Neanderthals rather than modem humans caused the extinction in Europe

B. Paleolithic humans in Europe along kill the big animals such as Giant deer

C. climatic change was not solely responsible for the mega fauna extinction in Europe

D. moderate and staggered extinction was mainly the result of fundamental climatic change

Reading Test 4

Section 1

You should spend about 20 minutes on Questions 1-13 which are based on the Reading Passage below.

New Agriculture in Oregon, US

A. Onion growers in eastern Oregon are adopting a system that saves water and keeps topsoil in place, while producing the highest quality "super colossal" onions. Pear growers in southern Oregon have reduced their use of some of the most toxic pesticides by up to two-thirds, and are still producing top-quality pears. Range managers throughout the state have controlled the poisonous weed tansy ragwort with insect predators and saved the Oregon livestock industry up to $4.8 million a year.

B. These are some of the results Oregon growers have achieved in collaboration with Oregon State University (OSU) researchers as they test new farming methods including integrated pest management (IPM). Nationwide, however, IFM has not delivered results comparable to those in Oregon. A recent U.S General Accounting Office (GAO) report indicates that while integrated pest management can result in dramatically reduced pesticide use, the federal government has been lacking in effectively promoting that goal and implementing IPM. Farmers also blame the government for not making the new options of pest management attractive. "Wholesale changes in the way that farmers control the pests on their farms is an expensive business." Tony Brown, of the National Farmers Association says. "If the farmers are given tax breaks to offset the expenditure, then they would willingly accept the new practices." The report goes on to note that even though the use of the riskiest pesticides has declined nationwide, they still make up more than 40 percent of all pesticides used today; and national pesticide use has risen by 40 million kilograms since 1992. "Our food supply remains the safest and highest quality on Earth but we continue to overdose our farmland with powerful and toxic pesticides and to under-use the safe and effective alternatives," charged Patrick Leahy, who commissioned the report. Green action groups disagree about the safety issue. "There is no way that habitual consumption of foodstuffs grown using toxic chemicals of the nature found on today's farms can be healthy for consumers," noted Bill Bowler, spokesman for Green Action, one of many lobbyists interested in this issue.

C. The GAO report singles out Oregon's apple and pear producers who have used the new IPM techniques with growing success. Although Oregon is clearly ahead of the nation, scientists at OSU are taking the Government Accounting Office criticisms seriously. "We must continue to develop effective alternative practices that will reduce environmental hazards and produce high quality products," said Paul Jepson, a professor of entomology at OSU and new director of

D. OSU's Integrated Plant Protection Centre (IPPC). The IPPC brings together scientists from OSU's Agricultural Experiment Station, OSU Extension service, the u.s. Department of Agriculture and Oregon farmers to help develop agricultural systems that will save water and soil, and reduce pesticides. In response to the GAO report, the Centre is putting even more emphasis on integrating research and farming practices to improve Oregon agriculture environmentally and economically.

E. "The GAO report criticizes agencies for not clearly communicating the goals of IPM," said Jepson. "Our challenge is to greatly improve the communication to and from growers, to learn what works and what doesn't. The work coming from OSU researchers must be adopted in the field and not simply languish in scientific journals."

F. In Oregon, growers and scientists are working together to instigate new practices. For example, a few years ago scientists at OSU's Malheur Experiment Station began testing a new drip irrigation system to replace old ditches that wasted water and washed soil and fertilizer into streams. The new system cut water and fertilizer use by half, kept topsoil in place and protected water quality.

G. In addition, the new system produced crops of very large onions, rated "super colossal" and highly valued by the restaurant industry and food processors. Art Pimms, one of the researchers at Malheur comments: "Growers are finding that when they adopt more environmentally benign practices, they can have excellent results. The new practices benefit the environment and give the growers their success."

H. OSU researchers in Malheur next tested straw mulch and found that it successfully held soil in place and kept the ground moist with less irrigation. In addition, and unexpectedly, the scientists found that the mulched soil created a home for beneficial beetles and spiders that prey on onion thrips - a notorious pest in commercial onion fields - a discovery that could reduce the need for pesticides. "I would never have believed that we could replace the artificial pest controls that we had before and still keep our good results," commented Steve Black, a commercial onion farmer in Oregon, "but instead we have actually surpassed expectations."

I. OSU researchers throughout the state have been working to reduce dependence on broad spectrum chemical sprays that are toxic to many kind of organisms, including humans. "Consumers are rightly putting more and more pressure on the industry to change its reliance on chemical pesticides, but they still want a picture-perfect product," said Rick Hilton, entomologist at OSU's Southern Oregon Research and Extension Centre, where researchers help pear growers reduce the need for highly toxic pesticides. Picture perfect pears are an important product in Oregon and traditionally they have required lots of chemicals. In recent years, the industry has faced stiff competition from overseas producers, so any new methods that growers adopt must make sense economically as well as environmentally. Hilton is testing a growth regulator that interferes with the molting of codling moth larvae. Another study used pheromone dispensers to disrupt codling moth mating. These and other methods of integrated pest management have allowed pear growers to reduce their use of organophosphates by two-thirds and reduce all other synthetic pesticides by even more and still

produce top-quality pears. These and other studies around the state are part of the effort of the IPPC to find alternative farming practices that benefit both the economy and the environment.

Questions 1-8

Use the information in the passage to match the people (listed A-G) with opinions or deeds below. Write the appropriate letters A-G in boxes 1-8 on your answer sheet.

NB you may use any letter more than once

A. Tony Brown

B. Patrick Leahy

C. Bill Bowler

D. Paul Jepson

E. Art Pimms

F. Steve Black

G. Rick Hilton

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1. There is a double-advantage to the new techniques.
2. The work on developing these alternative techniques is not finished.
3. Eating food that has had chemicals used in its production is dangerous to our health.
4. Changing current farming methods into a new one is not a cheap process.
5. Results have exceeded the anticipated goal.
6. The research done should be translated into practical projects.
7. The U.S. produces the best food in the world nowadays.
8. Expectations of end users of agricultural products affect the products.

Questions 9-13

Do the following statements agree with the information given in Reading Passage 1? In boxes 9-13 on your answer sheet, write

YES	*if the statement is true*
NO	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

9. Integrated Pest Management has generally been regarded as a success in j the across the US.

10. Oregon farmers of apples and pears have been promoted as successful examples of Integrated Pest Management.

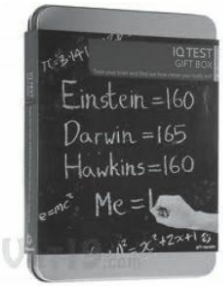
11. The IPPC uses scientists from different organisations globally

12. Shaw mulch experiments produced unplanned benefits.

13. The apple industry is now facing a lot of competition from abroad.

Section 2

Intelligence and Giftedness



A. In 1904 the French minister of education, facing limited resources for schooling, sought a way to separate die unable from the merely lazy. Alfred Binet got the job of devising selection principles and his brilliant solution put a stamp on the study of intelligence and was the forerunner of intelligence tests still used today, he developed a thirty-problem test in 1905, which tapped several abilities related to intellect, such as judgment and reasoning, the test determined a given child's mental age', the test previously established a norm for children of a given physical age. (for example, five-year-olds on average get ten items correct), therefore, a child with a mental age of five should score 10, which would mean that he or she was functioning pretty much as others of that age. the child's mental age was then compared to his physical age.

B. A large disparity in the wrong direction (e.g., a child of nine with a mental age of four) might suggest inability rather than laziness and mean he or she was earmarked for special schooling, Binet, however, denied that the test was measuring intelligence, its purpose was simply diagnostic, for selection only. This message was however lost, and caused many problems and misunderstanding later.

C. Although Binet's test was popular, it was a bit inconvenient to deal with a variety of physical and mental ages. So in 1912 Wilhelm Stem suggested simplifying this by reducing die two to a single number, he divided the mental age by the physical age, and multiplied the result by 100. An average child, irrespective of age, would score 100. a number much lower than 100 would suggest the need for help, and one much higher would suggest a child well ahead of his peer.

D. This measurement is what is now termed the IQ (for intelligence quotient) score and it has evolved to be used to show how a person, adult or child, performed in relation to others, (the term IQ was coined by Lewis m. Terman, professor of psychology and education of Stanford university, in 1916. he had constructed an enormously influential revision of Binet's test, called the Stanford-Binet test, versions of which are still given extensively.)

E. The field studying intelligence and developing tests eventually coalesced into a sub-field of psychology called psychometrics (psycho for ‘mind’ and metrics for 'measurements'). The practical side of psychometrics (the development and use of tests) became widespread quite early, by 1917, when Einstein published his grand theory of relativity, mass-scale testing was already in use. Germany’s unrestricted submarine warfare (which led to the sinking of the Lusitania in 1915) provoked the United States to finally enter the First World War in the same year. The military had to build up an army very quickly; it had two million inductees to sort out. Who would become officers and who enlisted men? Psychometricians developed two intelligence tests that helped sort all these people out, at least to some extent, this was the first major use of testing to decide who lived and who died, as officers were a lot safer on the battlefield, the tests themselves were given under horrendously bad conditions, and the examiners seemed to lack commonsense, a lot of recruits simply had no idea what to do and in several sessions most inductees scored zero! The examiners also came up with the quite astounding conclusion from the testing that the average American adult's intelligence was equal to that of a thirteen-year-old!

F. Intelligence testing enforced political and social prejudice, their results were used to argue that Jews ought to be kept out of the united states because they were so intelligently inferior that they would pollute the racial mix; and blacks ought not to be allowed to breed at all. And so abuse and test bias controversies continued to plaque psychometrics.

G. Measurement is fundamental to science and technology, science often advances in leaps and bounds when measurement devices improve, psychometrics has long tried to develop ways to gauge psychological qualities such as intelligence and more specific abilities, anxiety, extroversion, emotional stability, compatibility, with marriage partner, and so on. Their scores are often given enormous weight, a single IQ measurement can take on a life of its own if teachers and parents see it as definitive, it became a major issue in the 70s, when court cases were launched to stop anyone from making important decisions based on IQ test scores, the main criticism was and still is that current tests don’t really measure intelligence, whether intelligence can be measured at all is still controversial, some say it cannot others say that IQ tests are psychology’s greatest accomplishments

Questions 14-17

The reading Passage has seven paragraphs A-G.

Which paragraph contains the following information?

Write the correct letter *A-G* in boxes *14-17*on your answer sheet.

14 IQ is just one single factor of human characteristics.

15 Discussion of methodology behind the Professor Stern's test.

16 Inadequacy of IQ test from Binet.

17 The definition of IQ was created by a professor.

Questions 18-21

Choose the correct letter, A, B, c or D.

Write your answers in boxes 18-21 on your answer sheet.

18. Professor Binet devise the test to_____

A. find those who do not perform satisfied

B. choose the best one

C. measure the intelligence

D. establish the standard of intelligence

19. The test is designed according to_____

A. math

B. age

C. reading skill

D. gender

20. US Army used Intelligence tests to select_____

A. Officers

B. Normal Soldiers

C. Examiners

D. Submarine drivers.

21. the purpose of the text is to_____

A. Give credit to the contribution of Binet in IQ test
B. prove someone's theory is feasible,
C. discuss the validity and limitation of test
D. outline the history of the test

Questions 22-26

Do the following statements agree with the information given in Reading Passage 2? In boxes 22-26 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

22 Part the intension in designing the test by professor Binet has been misunderstood.

23 Age as a factor is completely overboked in the simplified tests by Wilhelm Stern

24 Einstein was a counter-example of IQ test conclusion.

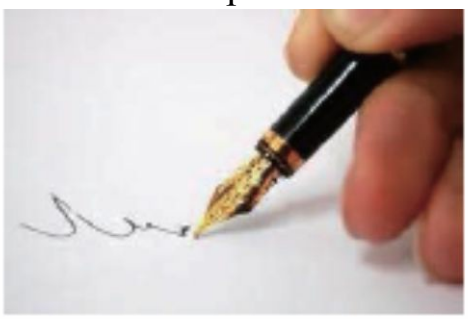
25 IQ test may probably bad to racial discrimination as a negative effect.

26 The author regards measuring intelligent test as a goal hardly meaningful

Section 3

Paper or Computer?

A. Computer technology was supposed to replace paper. But that hasn't happened. Every country in the Western world uses more paper today, on a per-capita basis, than it did ten years ago. The consumption of uncoated free-sheet paper, for instance the most common kind of office paper — rose almost fifteen per cent in the United States between 1995 and 2000. This is generally taken as



evidence of how hard it is to eradicate old, wasteful habits and of how stubbornly resistant we are to the efficiencies offered by computerization. A number of cognitive psychologists and ergonomics experts, however, don't agree. Paper has persisted, they argue, for very good reasons: when it comes to performing certain kinds of cognitive tasks, paper has many advantages over computers. The dismay people feel at the sight of a messy desk — or the spectacle of air-traffic controllers tracking flights through notes scribbled on paper strips - arises from a fundamental confusion about the role that paper plays in our lives.

B. The case for paper is made most eloquently in "The Myth of the Paperless Office", by two social scientists, Abigail Sellen and Richard Harper. They begin their book with an account of a study they conducted at the International Monetary Fund, in Washington, D.c. Economists at the I.M.F. spend most of their time writing reports on complicated economic questions, work that would seem to be perfectly suited to sitting in front of a computer. Nonetheless, the I.M.F. is awash in paper, and Sellen and Harper wanted to find out why. Their answer is that the business of writing reports - at least at the I.M.F. is an intensely collaborative process, involving the professional judgments and contributions of many people. The economists bring drafts of reports to conference rooms, spread out the relevant pages, and negotiate changes with one other. They go back to their offices and jot down comments in the margin, taking advantage of the freedom offered by the informality of the handwritten note. Then they deliver the annotated draft to the author in person, taking him, page by page, through the suggested changes. At the end of the process, the author spreads out all the pages with comments on his desk and starts to enter them on the computer — moving the pages around as he works, organizing and reorganizing, saving and discarding.

C. Without paper, this kind of collaborative and iterative work process would be much more difficult. According to Sellen and Harper, paper has a unique set of "affordances" — that is, qualities that permit specific kinds of uses. Paper is tangible: we can pick up a document, flip through it, read little bits here and there, and quickly get a sense of it. Paper is spatially flexible, meaning that we can spread it out and arrange it in the way that suits US best. And it's tailorable: we can easily annotate it, and scribble on it as we read, without altering the original text. Digital documents, of course, have then own affordances. They can be easily searched, shared, stored, accessed remotely, and linked to

other relevant material. But they lack the affordances that really matter to a group of people working together on a report. Sellen and Harper write:

D. Paper enables a certain kind of thinking. Picture, for instance, the top of your desk. Chances are that you have a keyboard and a computer screen off to one side, and a clear space roughly eighteen inches square in front of your chair. What covers the rest of the desktop is probably piles- piles of papers, journals, magazines, binders, postcards, videotapes, and all the other artifacts of the knowledge economy. The piles look like a mess, but they aren't. When a group at Apple Computer studied piling behavior several years ago, they found that even the most disorderly piles usually make perfect sense to the piler, and that office workers could hold forth in great detail about the precise history and meaning of thefr piles. The pile closest to the cleared, eighteen-inch-square working area, for example, generally represents the most urgent business, and within that pile the most important document of all is likely to be at the top. Piles are living, breathing archives. Over time, they get broken down and resorted, sometimes chronologically and sometimes thematically and sometimes chronologically and thematically; clues about certain documents may be physically embedded in the file by, say, stacking a certain piece of paper at an angle or inserting dividers into the stack.

E. But why do we pile documents instead of filing them? Because piles represent the process of active, ongoing thinking. The psychologist Alison Kidd, whose research Sellen and Harper refer to extensively, argues that "knowledge workers" use the physical space of the desktop to hold "ideas which they cannot yet categorize or even decide how they might use." The messy desk is not necessarily a sign of disorganization. It may be a sign of complexity: those who deal with many unresolved ideas simultaneously cannot sort and file the papers on their desks, because they haven't yet sorted and filed the ideas in their head. Kidd writes that many of the people she talked to use the papers on their desks as contextual cues to’’ recover a complex set of threads without difficulty and delay" when they come in on a Monday morning, or after their work has been interrupted by a phone call. What we see when we look at the piles on our desks is, in a sense, the contents of our brains.

F. This idea that paper facilitates a highly specialized cognitive and social process is a far cry from the way we have historically thought about the stuff. Paper first began to proliferate in the workplace in the late nineteenth century as part of the move toward "systematic management." To cope with the complexity of the industrial economy, managers were instituting company-wide policies and demanding monthly, weekly, or even daily updates from their subordinates. Thus was born the monthly sales report, and the office manual and the internal company newsletter. The typewriter took off in the eighteen-eighties, making it possible to create documents in a fraction of the time it had previously taken, and that was followed closely by the advent of carbon paper, which meant that a

typist could create ten copies of that document simultaneously. Paper was important not to facilitate creative collaboration and thought but as an instrument of control.

Questions 27-32

The reading passage has seven paragraphs, A-F

Choose the correct heading for paragraphs A-F *from the list below. Write the correct number, i-xi, in boxes 27-32 on your answer sheet.*

List of Headings

i. paper continued as a sharing or managing must

ii. piles can be more inspiring rather than disorgnising

iii. Favorable situation that economists used paper pages

iv. overview of an unexpected situation: paper survived

v. comparison between efficiencies for using paper and using computer

vi. IMF' paperless office seemed to be a waste of papers

vii. example of failure for avoidance of paper record

viii. There are advantages of using a paper in offices

ix. piles reflect certain characteristics in people' thought

x. joy of having the paper square in front of computer

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27. Paragraph A

28. Paragraph B

29. Paragraph C

30. Paragraph D

31. Paragraph E

32. Paragraph F

Questions 33-36

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 33-36 on your answer sheet.

Compared with digital documents, paper has several advantages. First it allows clerks to work in a ..... 33..... way among colleagues. Next, paper is not like virtual digital versions, it's..... 34.....Finally, because it is.....35....., note or comments can be effortlessly added as related information. However, shortcoming comes at the absence of convenience on task which is for

a.....36.....

Questions 37-40

Choose the correct letter, A, B, c or D.

Write your answers in boxes 37-40 on your answer sheet.

37. What do the ***economists*** from ***IMF*** say that their way of writing documents?

A. they note down their comments for freedom on the drafts

B. they finish all writing individually

C. they share ideas on before electronic version was made

D. they use electronic version fully

38. What is the implication of the ***"Piles*** " mentioned in the passage?

A. they have underlying orders

B. they are necessarily a mess

C. they are in time sequence order

D. they are in alphabetic order

39. What does the ***manager*** believe in sophisticated economy?

A. recorded paper can be as management tool

B. carbon paper should be compulsory

C. Teamwork is the most important

D. monthly report is the best way

40 According to the end of this passage, what is the reason ***why paper is not replaced*** by electronic vision?

A. paper is inexpensive to buy

B. it contributed to management theories in western countries

C. people need time for changing their old habit

D. it is collaborative and functional for tasks implement and management

Reading Test 5

Section 1

You should spend about 20 minutes on Questions 1-13 which are based on Reading Passage below.

Terminated Dinosaur Era

A. The age of dinosaurs, which ended with the cataclysmic bang of a meteor impact 65 million years ago, may also have begun with one. Researchers found recently the first direct, though tentative, geological evidence of a meteor impact 200 million years ago, coinciding with a mass extinction that eliminated half of the major groups of life and opened the evolutionary[1] door for what was then a relatively small group of animals: dinosaurs.

B. The cause and timing of the ascent of dinosaurs has have been much debated. It has been impossible to draw any specific conclusions because the transition between the origin of dinosaurs and their ascent to dominance has not been sampled in detail. "There is a geochemical signature of something important happening, probably an asteroid impact, just before the time in which familiar dinosaur-dominated communities appear," said Dr. Paul E. Olsen, a professor of earth and environmental sciences at Columbia University's Lamont-Doherty Earth Observatory in Palisades, N.Y.

C. Olsen and his colleagues studied vertebrate fossils from 80 sites in four different ancient rift basins, part of a chain of rifts that formed as North America began to split apart from the supercontinent that existed 230-190 million years ago. In the layer of rock corresponding to the extinction, the scientists found elevated amounts of the rare element iridium. A precious metal belonging to the platinum group of elements, iridium is more abundant in meteorites than in rocks.

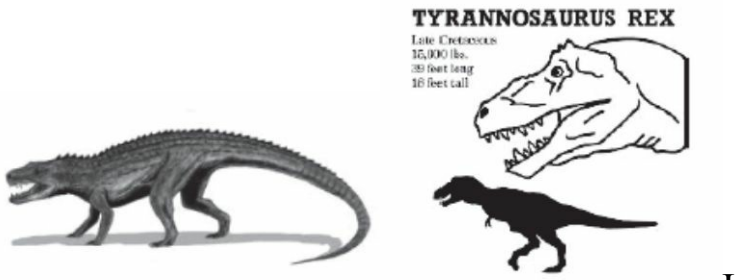
D. On Earth, A similar spike of iridium in 65 million-year-old rocks gave rise in the 1970s to the theory that a meteor caused the demise of the dinosaurs. That theory remained controversial for years until it was corroborated by other evidence and the impact site was found off

the Yucatan Peninsula. Scientists will need to examine the new iridium anomaly similarly. The levels are only about one-tenth as high as those found at the later extinction. That could mean that the meteor was smaller or contained less iridium or that a meteor was not involved—iridium can also come from the Earth's interior, belched out by volcanic eruptions. Dr. Michael J. Benton, a professor of vertebrate paleontology at the University of Bristol in England, described the data as "the first reasonably convincing evidence of an iridium spike".

E. The scientists found more evidence of rapid extinction in a database of 10,000 fossilized footprints in former lake basins from Virginia to Nova Scotia. Although individual species cannot usually be identified solely from their footprints — the tracks of a house cat, for example, resemble those of a baby tiger — footprints are much more plentiful than fossil bones and can provide a more complete picture of the types of animals walking around. "It makes it very easy for us to tell the very obvious signals of massive fauna change," Dr. Olsen said. Because the sediment piles up quickly in lake basins, the researchers were able to assign a date to each footprint, based on the layer of rock where it was found. They determined that the mix of animals walking across what is now the East Coast of North America changed suddenly about 200 million years ago.

F. The tracks of several major reptile groups continue almost up to the layer of rock marking the end of the Triassic geologic period 202 million years ago, and then vanish in younger layers from the Jurassic period. "I think the footprint methodology is very novel and very exciting," said Dr. Peter D. Ward, a professor of geology at the University of Washington. He called the data "very required more research. Last year, researchers led by Dr. Ward reported that the types of carbon in rock changed abruptly at this time, indicating a sudden dying off of plants over less than 50,000 years. The footprint research reinforces the hypothesis that the extinction was sudden.

G. Several groups of dinosaurs survived that extinction, and the footprints show that new groups emerged soon afterward. Before the extinction, about one-fifth of the footprints were left by dinosaurs; after the extinction, more than half were from dinosaurs. The changes, the researchers said, occurred within 30,000 years-a geological blink of an eye. The scientists postulate that the asteroid or comet impact and the resulting death of Triassic competitors allowed a few groups of carnivorous dinosaurs to evolve in size very quickly and dominate the top of the terrestrial food chain globally.



H. Among the creatures that disappeared in the extinction were the dominant predators at the time: 15-foot-long **rauisuchians** with great knife-like teeth and **phytosaurs** that resembled large crocodiles. Dinosaurs first evolved about 230 million years ago, but they were small, competing in a crowded ecological niche. Before the extinction 200 million years ago. the largest of the meat-eating dinosaurs were about the see of large dogs. Not terribly impressive." Dr. Olsen said. The dinosaurs quickly grew. The toe-to-heel length of the foot of a meat eater from the Jurassic period was on average 20 percent longer than its Triassic ancestor. Larger feet can carry bigger bodies; the scientists infer the dinosaurs doubled in weight, eventually evolving into fearsome **velociraptors**, **Tyrannosaurus rex** and other large

carnivorous dinosaurs.

I. The spurt in evolution is similar to the rise of mammals after the extinction of dinosaurs. Mammals, no larger than small dogs during the age of dinosaurs, diversified into tigers, elephants, whales and people after the reptilian competition died away. The success of the dinosaurs after the Triassic-Jurassic extinction may be why they did not survive the second extinction. "Small animals always do better in catastrophic situations. Dr. Olsen said, because they can survive on smaller amounts of food." He also pointed out that scientists now believe the small dinosaurs did survive. "We just call them birds," he said.

Q ụ est ị on 1-6

Use the information in the passage to match the people (listed A- C) with opinions or deeds (listed 1-6) below.

Write the appropriate letter (A-C) in boxes 1-6 on your answer sheet.

A. Paul Olsen
B. Michael Benton
C. Peter Ward

1 Large animals are in a disadvantageous position when disasters happen.

2 Radical changes in carbon types are related to massive extinction of vegetation.

3 The changes in earth's animal species become easier to identify by adding footprint investigation.

4 Geochemical evidence suggests an asteroid impact before dinosaurs appeared.

5 Footprint study is a way of research.

6 Persuasive clues of an iridium spike were discovered for the first time.

Question 7-13

Do the following statements agree with the information given in Reading Passage? In boxes 7-13 on your answer sheet write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

7 The rare element, iridium, was presented both on earth and in meteorites.

8 The meteor impact theory had been suspected before the discovery of the impact site and other supporting evidence.

9 Footprints are of little value in providing information, in comparison to fossil bones, because individual species cannot be identified with footprints.

10 According to scientists, the transition to a dinosaur-dominated era took place very quickly by geological time scales.

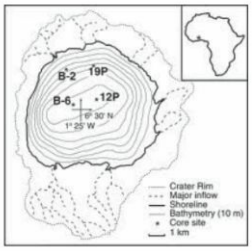
11 The creatures that disappeared in the extinction were the dominantly the 15-foot-long rauisuchians and large crocodiles.

12 Tyrannosaurus rex was larger in body size than other carnivorous dinosaurs.

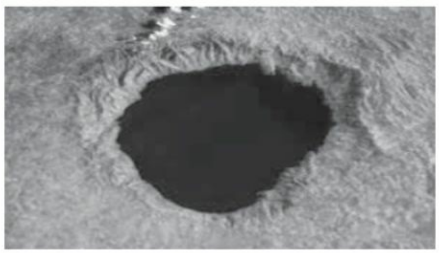
13 Large dinosaurs died out but small ones evolved and competed with birds and mammals.

Section 2

Detection of a meteorite Lake



A. AS THE SUN rose over picturesque Lake Bosumtwi, a team of Syracuse University researchers prepared for another day of using state-of-the-art equipment to help unlock the mysteries hidden below the lake bottom. Nestled in the heart of Ghana, the lake holds an untapped reservoir of information that could help scientists predict future climate changes by looking at evidence from the past. This information will also improve the scientists' understanding of the changes that occur in a region struck by a massive meteorite

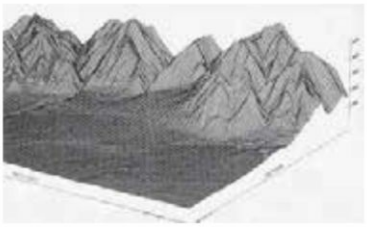


B. The project, led by earth sciences professor Christopher Scholz of the College of Arts and Sciences and funded by the National Science Foundation (NSF), is the first large-scale effort to study Lake Bosumtwi, which formed 1.1 million years ago when a giant meteor crashed into the Earth's surface. The resulting crater is one of the largest and most well-preserved geologically young craters in the world, says Scholz, who is collaborating on the project with researchers from the University of Arizona, the University of South Carolina, the University of Rhode Island, and several Ghanaian institutions. "Our data should provide information about what happens when an impact hits hard, pre-Cambrian, crystalline rocks that are a billion years old," he says.

C. Equally important is the fact that the lake, which is about 8 kilometers in diameter, has no natural outlet. The rim of the crater rises about 250 meters above the water's surface. Streams flow into the lake, Scholz says, but the water leaves only by evaporation, or by seeping through the lake sediments. For the past million years, the lake has acted as a tropical rain, filling and drying with changes in precipitation and the tropical climate. The record of those changes is hidden in sediment below the lake bottom. "The lake is one of the best sites in the world for the study of **ropical climate** changes," Scholz says. "The tropics are the heat engine for the Earth's climate. To understand global climate, we need to have records of climate changes from many sites around the world, including the tropics."

D. Before the researchers could explore the lake's subsurface, they needed a boat with a large, working deck area that could carry eight tons of scientific equipment. The boat dubbed R/V Kilindi was built in Florida last year. It was constructed in modules that were dismantled, packed inside a shipping container, and reassembled over a 10-day period in late November and early December 1999 in the rural village of Abono, Ghana. The research team then spent the next two weeks

testing the boat and equipment before returning to the United States for the holidays.



E. In mid-January, five members of the team—Keely Brooks, an earth sciences graduate student; Peter Cattaneo, a research analyst; and Kiram Lezzar, a postdoctoral scholar, all from SU; James McGill, a geophysical field engineer; and Nick Peters, a Ph.D. student in geophysics from the University of Miami—returned to Abono to begin collecting data about the lake's subsurface using a technique called seismic reflection profiling. In this process, a high-pressure air gun is used to create small, pneumatic explosions in the water. The sound energy penetrates about 1,000 to 2,000 meters into the lake's subsurface before bouncing back to the surface of the water.

F. The reflected sound energy is detected by underwater microphones-called hydrophones—embedded in a 50-meter-long cable that is towed behind the boat as it crosses the lake in a carefully designed grid pattern. On-board computers record the signals, and the resulting data are then processed and analyzed in the laboratory. “The results will give US a good idea of the shape of the basin, how thick the layers of sediment are, and when and where there were major changes in sediment accumulation,” Scholz says. “We are now developing three-dimensional perspective of the lake’s subsurface and the layers of sediment that have been laid down.”

G. Team members spent about four weeks in Ghana collecting the data. They worked seven, days a week/ arriving at the lake just after sunrise. On a good day, when everything went as planned, the team could collect data and be back at the dock by early afternoon. Except for a few relatively minor adjustments, the equipment and the boat worked well. Problems that arose were primarily non-scientific—tree stumps, fishing nets, cultural barriers, and occasional misunderstandings with local villagers.

H. Lake Bosumtwi, the largest natural freshwater lake in the country, is sacred to the Ashanti people, who believe their souls come to the lake to bid farewell to their god. The lake is also the primary source of fish for the 26 surrounding villages. Conventional canoes and boats are forbidden. Fishermen travel on the lake by floating on traditional planks they propel with small paddles. Before die research project could begin, Scholz and his Ghanaian counterparts had to secure special permission from tribal chiefs to put the R/V Kilindi on the lake.

I. When the team began gathering data, rumors flew around the lake as to why the researchers were there. "Some thought we were dredging the lake for gold, others thought we were going to drain the lake or that we had bought the lake," Cattaneo says. "But once the local people understood why we were there, they were very helpful"

Questions 14-18

Do the following statements agree with the information given in Reading Passage 1? In boxes 14-

18 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

14 With the investigation of the lake, scientist may predict the climate changes in the future.

15 The crater resulted from a meteorite impact is the largest and most preserved one in the world.

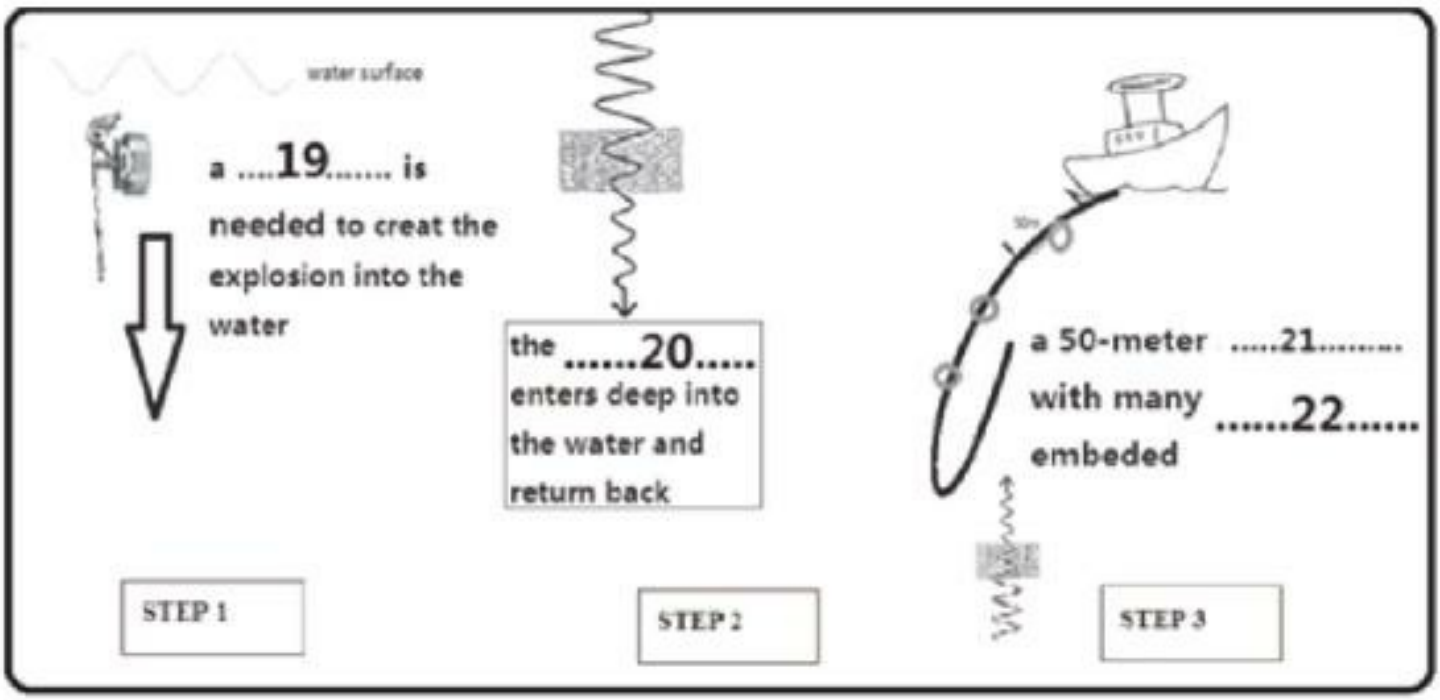
16 The water stored in lake Bosumtwi was gone only by seeping through the lake sediments.

17 Historical climate changes can be detected by the analysis of the sediment in the lake.

18 The greatest obstacle to research of scientists had been the interference by the locals due to the ủr indigenous believes.

Questions 19 - 22

There are three steps of collecting data from the lake as followings, please filling the blanks in the Flow Chart below:


water surface
a ....19..... is needed to creat the explosion into the water
the .....20..... enters deep into the water and return back
a 50-meter .....21.....
with many .....22.....
embeded
STEP 1
STEP 2
STEP 3

Questions 23-27

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 23-27 on your answer sheet.

The boat-double R/V Kilindi crossed the lake was dismantled and stored in a .....23..... The

technology they used called.....24.....; They created sound energy in to 1000-2000 metres in to the bottom of the lake, and used separate equipment to collect the returned waves. Then the data had been analyzed and processed in the.....25..... Scholz also added that they were now building .....26.....view of the sediment or sub-image in the bottom of the lake. Whole set of equipment works well yet the ship should avoid physical barrier including tree stumps or.....27.....floating on the surface of the lake.

Section 3

Internal and External Marketing

A. Employees need to hear the same messages that you send out to the marketplace. At most companies, however, internal and external communications are often mismatched. This can be very confusing, and it threatens employees' perceptions of the company's integrity: They are told one thing by management but observe that a different message is being sent to the public. One health insurance company, for instance, advertised that the welfare of patients was the company's number one priority, while employees were told that theft main goal was to increase the value of theft stock options through cost reductions. And one major financial services institution told customers that it was making a major shift in focus from being a financial retailer to a financial adviser, but, a year later, research showed that the customer experience with the company had not changed. It turned out that company leaders had not made an effort to sell the change internally, so employees were still churning out transactions and hadn't changed theft behavior to match theft new adviser role.

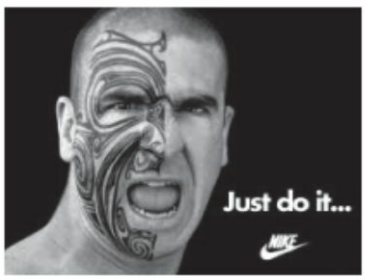
B. Enabling employees to deliver on customer expectations is important, of course, but it's not the only reason a company needs to match internal and external messages. Another reason is to help push the company to achieve goals that might otherwise be out of reach. In 1997, when IBM launched its e-business campaign (which is widely credited for turning around the company's image), it chose to ignore research that suggested consumers were unprepared to embrace IBM as a leader in e-business. Although to the outside world this looked like an external marketing effort, IBM was also using the campaign to align employees around the idea of the Internet as the future of technology. The internal campaign changed the way employees thought about everything they did, from how they named products to how they organized staff to how they approached selling. The campaign was successful largely because it gave employees a sense of direction and purpose, which in turn restored theft confidence in IBM's ability to predict the future and lead the technology industry. Today, research shows that people are four times more likely to associate the term "e-business" with IBM than with its nearest competitor, Microsoft.

C. The type of "two-way branding" that IBM did so successfully strengthens both sides of the equation. Internal marketing becomes stronger because it can draw on the same "big idea" as advertising. Consumer marketing becomes stronger because the messages are developed based on

employees' behavior and attitudes, as well as on the company's strengths and capabilities—indeed, the themes are drawn from the company's very soul. This process can result in a more distinct advertising idea because marketers are more likely to create a message that[7] s unique to the company.

D. Perhaps even more important, by taking employees into account, a company can avoid creating a message that doesn't resonate with staff or, worse, one that builds resentment. In 1996, United Airlines shelved its "Come Fly the Friendly Skies" slogan when presented with a survey that revealed the depth of customer resentment toward the airline industry. In an effort to own up to the industry's shortcomings. United launched a new campaign, "Rising," in which it sought to differentiate itself by acknowledging poor service and promising incremental improvements such as better meals. While this was a logical premise for the campaign given the tenor of the times, a campaign focusing on customers' distaste for flying was deeply discouraging to the staff. Employee resentment ultimately made it impossible for United to deliver the improvements it was promising, which in turn undermined the "Rising" pledge. Three years later. United decided employee opposition was undermining its success and pulled the campaign. It has since moved to a more inclusive brand message with the line "United," which both audiences can embrace. Here, a fundamental principle of advertising—find and address a customer concern—failed United because it did not consider the internal market.

E. When it comes to execution, the most common and effective way to link internal and external marketing campaigns is to create external advertising that targets both audiences. IBM used this tactic very effectively when it launched its e-business campaign. It took out an eight-page ad in the Wall Street Journal declaring its new vision, a message directed at both customers and internal stakeholders. This is an expensive way to capture attention, but if used sparingly, it is the most powerful form of communication; in fact, you need do it only once for everyone in the company to read it. There's a symbolic advantage as well. Such a tactic signals that the company is taking its pledge very seriously; it also signals transparency—the same message going out to both audiences.



F. Advertising isn't the only way to link internal and external marketing. At Nike, a number of senior executives now hold the additional title of "Corporate Storyteller." They deliberately avoid stories of financial successes and concentrate on parables of "just doing it," reflecting and reinforcing the company's ad campaigns. One tale, for example, recalls how legendary coach and Nike cofounder Bill Bowerman, in an effort to build a better shoe for his team, poured rubber into the family waffle iron, giving birth to the prototype of Nike's famous Waffle Sole. By talking about such inventive moves, the company hopes to keep the spirit of innovation that characterizes its ad campaigns alive and well within the company.

G. But while their messages must be aligned, companies must also keep external promises a little ahead of internal realities. Such promises provide incentives for employees and give them something to live up to. In the 1980s, Ford turned *"Quality is Job* " from an internal rallying cry into a consumer slogan in response to the threat from cheaper, more reliable Japanese cars. It did so before the claim was fully justified, but by placing it in the public arena, it gave employees an incentive to match the

Japanese. If the promise is pushed too far ahead, however, it loses credibility. When a beleaguered British Rail launched a campaign announcing service improvement under the banner "We're Getting There," it did so prematurely. By drawing attention to the gap between the promise and the reality, it prompted destructive press coverage. This, in turn, demoralized staff, who had been legitimately proud of the service advances they had made.

Questions 28-34

Use the information in the passage to match the company (listed A-F) with correct category or deeds below. Write the appropriate letters A-F in boxes 28-33 on your answer sheet.

NB: you may use any letter more than once

A. legendary anecdote inspire employee successfully

B. advertisement campaign inspire employees and ensure leading role in business

C. improper ads campaign brings negative effect

D. internal and external announcement are different

E. campaign brings positive and realistic expectation internally

F. a bad slogan that failed both to win support internally and raise standard to its poor service

Questions 35-38

Do the following statements agree with the information given in Reading Passage 3? In boxes 35-38 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

35. Employers in almost all companies successfully make their employees fully understand the outside campaign.

36. Currently IBM is more prominent in the area of E-business

37. United Airline finally gave up an ads slogan due to a survey in 1996.

38. Nike had improved company performance through telling employees legendary corporation stories.

Questions 39-40

Choose Two correct letters below

Write your answers in boxes 39-40 on your answer sheet.

Please choose TWO approaches in the passage mentioned that were employed as company strategy:

A. promoting the visual effect of their products' advertisement

B. launching inspiring campaigns internally

C. introducing inner competition
D. learning how to tell stories among senior executives
E. applying an appropriate slogan

Reading Test 6

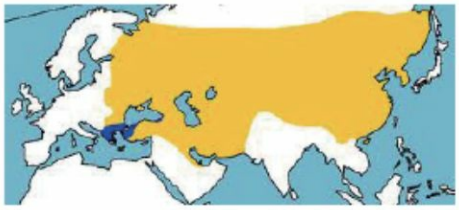
Section 1

OTTER

A. Otters have long, thin bodies and short legs - ideal for pushing through dense undergrowth or hunting in tunnels. An adult male may be up to 4 feet long and 301bs. Females are smaller typically. The Eurasian otter's nose is about the smallest among the otter species and has a characteristic shape described as a shallow 'W. An otter's tail (or rudder, or stem) is stout at the base and tapers towards the tip where it flattens. This forms part of the propulsion unit when swimming fast under water. Otter fur consists of two types of hair: stout guard hairs which form a waterproof outer covering, and under-fur which is dense and fine, equivalent to an otter's thermal underwear. The fur must be kept in good condition by grooming. Sea water reduces the waterproofing and insulating qualities of otter fur when salt water in the fin. This is why freshwater pools are important to otters living on the coast. After swimming, they wash the salts off in the pools and then squirm on the ground to rub dry against vegetation.

B. Scent is used for hunting on land, for communication and for detecting danger, **otterine** sense of smell is likely to be similar in sensitivity to dogs. Otters have small eyes and are probably short-sighted on land. But they do have the ability to modify the shape of the lens in the eye to make it more spherical, and hence overcome the refraction of water. In clear water and good light, otters can hunt fish by sight. The otter's eyes and nostrils are placed high on its head so that it can see and breathe even when the rest of the body is submerged. Underwater, the otter holds its legs against the body, except for steering, and the hind end of the body is flexed in a series of vertical undulations. River otters have webbing which extends for much of the length of each digit, though not to the very end. Giant otters and sea otters have even more prominent webs, while the Asian short-clawed otter has no webbing - they hunt for shrimps in ditches and paddy fields so they don't need the swimming speed. Otter ears are tiny for streamlining, but they still have very sensitive hearing and are protected by valves which close them against water pressure.

C. A number of constraints and preferences limit suitable habitats for otters. Water is a must and the rivers must be large enough to support a healthy population of fish. Being such shy and wary creatures, they will prefer territories where man's activities do not impinge greatly. Of course, there must also be no other otter already in residence - this has only become significant again recently as populations start to recover. Coastal otters have a much more abundant food supply and ranges for males and females may be just a few kilometres of coastline. Because male ranges are usually larger a male otter may find his range overlaps with two or three females - not bad! Otters will eat anything that they can get hold of - there are records of sparrows and snakes and slugs being gobbled. Apart from fish the most common prey are crayfish, crabs and water birds. Small mammals are occasionally taken, most commonly rabbits but sometimes even moles.



D. Eurasian otters will breed any time where food is readily available. In places where condition is more severe, Sweden for example where the lakes are frozen for much of winter, cubs are born in spring. This ensures that they are well grown before severe weather returns. In the Shetlands, cubs are born in summer when fish is more abundant. Though otters can breed every year, some do not. Again, this depends on food availability. Other factors such as food range and quality of the female may have an effect. Gestation for Eurasian otter is 63 days, with the exception of Lutra canadensis whose embryos may undergo delayed implantation. Otters normally give birth in more secure dens to avoid disturbances. Nests are lined with bedding to keep the cubs warm while mummy is away feeding.

E. Otters normally give birth in more secure dens to avoid disturbances. Nests are lined with bedding (reeds, waterside plants, grass) to keep the cubs warm while is away feeding. Litter Size varies between 1 and 5. For some unknown reason, coastal otters tend to produce smaller litters. At five weeks they open their eyes - a tiny cub of 700g. At seven weeks they're weaned onto solid food. At ten weeks they leave the nest, blinking into daylight for the first time. After three months they finally meet the water and learn to swim. After eight months they are hunting, though the mother still provides a lot of food herself. Finally, after nine months she can chase them all away with a clear conscience, and relax - until the next fella shows up.

F. The plight of the British otter was recognised in the early 60s, but it wasn't until the late 70s that the chief cause was discovered. Pesticides, such as dieldrin and aldrin, were first used in 1955 in agriculture and other industries - these chemicals are very persistent and had already been recognised as the cause of huge declines in the population of peregrine falcons, sparrow hawks and other predators. The pesticides entered the river systems and the food chain - micro-organisms, fish and finally otters, with every step increasing the concentration of the chemicals. From 1962 the chemicals were phased out, but while some species recovered quickly, otter numbers did not - and continued to fall into the 80s. This was probably due mainly to habitat destruction and road deaths. Acting on populations fragmented by the sudden decimation in the 50s and 60s, the loss of just a handful of otters in one area can make an entire population unviable and spell the end.

G. Otter numbers are recovering all around Britain - populations are growing again in the few areas where they had remained and have expanded from those areas into the rest of the country. This is almost entirely due to legislation, conservation efforts, slowing down and reversing the destruction of suitable otter habitat and reintroductions from captive breeding programs. Releasing captive-bred otters is seen by many as a last resort. The argument runs that where there is no suitable habitat for them they will not survive after release and where there is suitable habitat, natural populations should be able to expand into the area. However, reintroducing animals into a fragmented and fragile population may add just enough impetus for it to stabalise and expand, rather than die out. This is what the Otter Trust accomplished in Norfolk, where the otter population may have been as low as twenty animals at the beginning of the 1980s. The Otter Trust has now finished its captive breeding program entirely, great news because it means it is no longer needed.

Questions 1-9

The reading Passage has seven paragraphs A-G.

Which paragraph contains the following information?

Write the correct letter *A-G,* in boxes *1-9* on your answer sheet.

NB: You may use any letter more than once.

1 A description of how otters regulate vision underwater

2 The fit-for-purpose characteristics of otter's body shape

3 A reference to an underdeveloped sense

4 An explanation of why agriculture failed in otter conservation efforts

5 A description of some of the otter's social characteristics

6 A description of how baby otters grow

7 The conflicted opinions on how to preserve

8 A reference to legislative act

9 An explanation of how otters compensate for heat loss

Questions 10-13

Answer the questions below.

Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the passage for each answer

10. What affects the outer fur of otters?

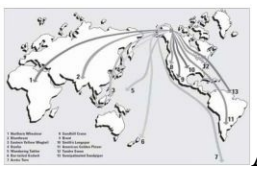
11. What skill is not necessary for Asian short-clawed otters?

12. Which type of otters has the shortest range?

13. Which type of animals do otters hunt occasionally?

Section 2

BIRD MIGRATION 2



A. Birds have many unique design features that enable them to perform such amazing feats of endurance. They are equipped with lightweight, hollow bones, intricately designed feathers providing both lift and thrust for rapid flight, navigation systems superior to any that man has developed, and an ingenious heat conserving design that, among other things, concentrates all blood circulation beneath layers of warm, waterproof plumage, leaving them fit to face life in the harshest of climates. Theft respiratory systems have to perform efficiently during sustained flights at altitude, so they have a system of extracting oxygen from their lungs that for exceeds that of any other

animal. During the later stages of the summer breeding season, when food is plentiful, their bodies are able to accumulate considerable layers of fat, in order to provide sufficient energy for theft long migratory flights.

B. The fundamental reason that birds migrate is to find adequate food during the winter months when it is in short supply. This particularly applies to birds that breed in the temperate and Arctic regions of the Northern Hemisphere, where food is abundant during the short growing season. Many species can tolerate cold temperatures if food is plentiful, but when food is not available they must migrate. However, intriguing questions remain.

C. One puzzling fact is that many birds journey much further than would be necessary just to find food and good weather. Nobody knows, for instance, why British swallows, which could presumably survive equally well if they spent the winter in equatorial Africa, instead fly several thousands of miles further to theft preferred winter home in South Africa Cape Province. Another mystery involves the huge migrations performed by arctic terns and mudflat-feeding shorebirds that breed close to Polar Regions. In general, the further north a migrant species breeds, the further south it spends the winter. For arctic terns this necessitates an annual round trip of 25,000 miles. Yet, en route to then final destination in far-flung southern latitudes, all these individuals overfly other areas of seemingly suitable habitat spanning two hemispheres. While we may not fully understand bird's reasons for going to particular places, we can marvel at then feats.

D. One of the greatest mysteries is how young birds know how to find the traditional wintering areas without parental guidance. Very few adults migrate with juveniles in tow, and youngsters may even have little or no inkling of then parents' appearance. A familiar example Is that of the cuckoo, which lays its eggs in another species' nest and never encounters its young again. It is mind boggling to consider that, once raised by its host species, the young cuckoo makes it own way to ancestral wintering grounds in the tropics before returning single-handedly to northern Europe the next season to seek out a mate among its own kind. The obvious implication is that it inherits from its parents an inbuilt route m a p and direction-finding capability, as well as a mental image of what another cuckoo looks like. Yet nobody has the slightest idea as to how this is possible.

E. Mounting evidence has confirmed that birds use the positions of the sun and stars to obtain compass directions. They seem also to be able to detect the earth's magnetic field, probably due to having minute crystals of magnetite in the region of then brains. However, true navigation also requires an awareness of position and time, especially when lost. Experiments have shown that after being taken thousands of miles over an unfamiliar land-mass, birds are still capable of returning rapidly to nest sites. Such phenomenal powers are the product of computing a number of sophisticated cues, including an inborn map of the night sky and the pull of the earth's magnetic field. How the buds use then 'instruments' remains unknown, but one thing is clear: they see the world with a superior sensory perception to ours. Most small birds migrate at night and take then direction from the position of the setting sun. However, as well as seeing the sun go down, they also seem to see the plane of polarized light caused by it, which calibrates then compass. Traveling at night provides other benefits. Daytime predators are avoided and the danger of dehydration due to flying for long periods in warm, sunlit skies is reduced. Furthermore, at night the air is generally cool and less turbulent and so conducive to sustained, stable flight.

F. Nevertheless, all journeys involve considerable risk, and part of the skill in arriving safely is setting off at the right time. This means accurate weather forecasting, and utilizing favorable winds.

Birds are adept at both, and, in laboratory tests, some have been shown to detect the minute difference in barometric pressure between the floor and ceiling of a room. Often birds react to weather changes before there is any visible sign of them. Lapwings, which feed on grassland, flee west from the Netherlands to the British Isles, France and Spain at the onset of a cold snap. When the ground surface freezes the birds could starve. Yet they return to Holland ahead of a thaw, their arrival linked to a pressure change presaging an improvement in the weather.

G. In one instance a Welsh Manx shearwater carried to America and released was back in its burrow on Skokholm Island, off the Pembrokeshire coast, one day before a letter announcing its release! Conversely, each autumn a small number of North American birds are blown across the Atlantic by fast-moving westerly tail winds. Not only do they arrive safely in Europe, but, based on ringing evidence, some make it back to North America the following spring, after probably spending the winter with European migrants in sunny African climes.

Questions 14-20

Reading passage 2 has seven paragraphs, A-G

Choose the correct heading for each paragraph from the list of headings below. Write the correct number, i-x, in boxes 14-20 on your answer sheet.

List of headings

i The best moment to migrate

ii The unexplained rejection of closer feeding ground

iii The influence of weather on the migration route

iv Physical characteristics that allow birds to migrate V The main reason why birds migrate

vi The best wintering grounds for birds

vii Research findings on how birds migrate

viii Successful migration despite trouble of wind

ix Contrast between long-distance migration and short-distance migration

x Mysterious migration despite lack of teaching

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14 Paragraph A

15 Paragraph B

16 Paragraph c

17 Paragraph D

18 Paragraph E

19 Paragraph F

20 Paragraph G

Questions 21-22

Choose TWO letters, A-E.

Write the correct letters in boxes 21 and 22 on your answer sheet. Which TWO of the following statements are true of bird migration?

A. Birds often fly further than they need to.

B. Birds traveling in family groups are safe, c Birds flying at night need less water.

D. Birds have much sharper eye-sight than humans,

E. Only share birds are resistant to strong winds.

Question 23-26

Complete the sentences below using NO MORE THAN TWO WORDS from the passage. Write your answers in boxes 25-26 on your answer sheet

23 It is a great mystery that young birds like cuckoos can find their wintering grounds without……

24 Evidence shows birds can tell directions nice a…… by observing the sun and theaters.

25 One advantage for birds flying at night is that they can avoid contact with…….

26 Laboratory tests show that birds can detect weather without……..signs.

Section 3

Talc Powder

A. Peter Brigg discovers how talc from Luzenac's Trimouns in France find its way into food and agricultural products -from chewing gum to olive oil. High in the French Pyrenees, some 1,700m above see level, lies Trimouns, a huge deposit of hydrated magnesium silicate - talc to you and me. Talc from Trimouns, and from ten other Luzenac mines across the globe, is used in the manufacture of a vast array of everyday products extending from paper, paint and plaster to cosmetics, plastics and car tyres. And of course there is always talc's best known end use: talcum powder for babies' bottoms. But the true versatility of this remarkable mineral is nowhere better displayed than in its sometimes surprising use in certain niche markets in the food and agriculture industries.

B. Take, for example, the chewing gum business. Every year. Talc de Luzenac France - which owns and operates the Trimouns mine and is a member of the international Luzenac Group (art of Rio Tinto minerals) - supplies about 6,000 tones of talc to

chewing gum manufacturers in Europe. “We’ve been selling to this sector of the market since the 1960s,” says Laurent Fournier, sales manager in Luzenac’s Specialties business unit in Toulouse. “Admittedly, in terms of our total annual sales of talc, the amount we supply to chewing gum manufacturers is relatively small, but we see it as a valuable niche market: one where customers place a premium on securing supplies from a reliable, high quality source. Because of this, long term allegiance to a proven suppler is very much a feature of this sector of the talc market.” Switching sources - in the way that you might choose to buy, say, paperclips from Supplier A rather than from Supplier B - is not a easy option for chewing gum manufacturers,” Fournier says. “The cost of reformulating is high, so when customers are using a talc grade that works, even if it’s expensive, they are understandably reluctant to switch.”

C. But how is talc actually used in the manufacture of chewing gum? Patrick Delord, an engineer with a degree in agronomics, who has been with Luzenac for 22 years and is now senior market development manager. Agriculture and Food, in Europe, explains that chewing gums has four main components. “The most important of them is the gum base,” he says. “It’s the gum base that puts the chew into chewing gum. It binds all the ingredients together, creating a soft, smooth texture. To this the manufacturer then adds sweeteners, softeners and flavourings. Our talc is used as a filler in the gum base. The amount varies between, say, ten and 35 per cent, depending on the type of gum. Fruit flavoured chewing gum, for example, is slightly acidic and would react with the calcium carbonate that the manufacturer might otherwise use as a filler. Talc, on the other hand, makes an ideal filler because it’s non-reactive chemically. In the factory, talc is also used to dust the gum base pellets and to stop the chewing gum sticking during the lamination and packing process,” Delord adds.

D. The chewing gum business is, however, just one example of talc’s use in the food sector. For the past 20 years or so, olive oil processors in Spain have been taking advantage of talc’s unique characteristics to help them boost the amount of oil they extract from crushed olives. According to Patrick Delord, talc is especially useful for treating what he calls “difficult” olives. After the olives are harvested -preferably early in the morning because their taste is better if they are gathered in the cool of the day - they are taken to the processing plant. There they are crushed and then stirred for 30-45 minutes. In the old days, the resulting paste was passed through an olive press but nowadays it’s more common to add water and the mixture to separate the water and oil from the solid matter. The oil and water are then allowed to settle so that the olive oil layer can be decanted off (and bottled. “Difficult” olives are those that are more reluctant than the norm to yield up their full oil content. This may be attributable to the particular species of olive, or to its water content and the time of year the olives are collected - at the beginning and the end of the season their water content is often either too high or too low. These olives are easy to recognize because they produce a lot of extra foam during the stirring process, a consequence of an excess of a fine solid that acts as a natural emulsifier. The oil in this emulsion is lost when the water is disposed of. Not only that, if the waste water is disposed of directly into local fields - often the case in many smaller processing operations - the emulsified oil may take some time to biodegrade and so be harmful to the environment.

I. “If you add between a half and two per cent of talc by weight during the stirring process, it absorbs the natural emulsifier in the olives and so boosts the amount of oil you can extract,” says Delord. “In addition, talc’s flat, ‘platey’ structure helps increase the size of the oil droplets liberated during stirring, which again improves the yield. However, because talc is chemically inert, it doesn’t affect the colour, taste, appearance or composition of the resulting olive oil.”

F. If the use of talc in olive oil processing and in chewing gum is long established, new applications in the food and agriculture industries are also constantly being sought by Luzenac. One such promising new market is fruit crop protection, being pioneered in the US. Just like people, fruit can get sunburned. In fact, in very sunny regions up to 45 per cent of a typical crop can be affected by heat stress and sunburn. However, in the case of fruit, it’s not so much the ultra violet rays which harm the crop as the high surface temperature that the sun’s rays create.

G. To combat this, farmers normally use either chemicals or spray a continuous fine canopy of mist above the fruit trees or bushes. The trouble is, this uses a lot of water - normally a precious commodity in hot, sunny areas - and it is therefore expensive. What’s more, the ground can quickly become waterlogged. “So our idea was to coat the fruit with talc to protect it from the sun,” says Greg Hunter, a marketing specialist who has been with Luzenac for ten years. “But to do this, several technical challenges had first to be overcome. Talc is very hydrophobic: it doesn’t like water. So in order to have a viable product we needed a wettable powder - something that would go readily into suspension so that it could be sprayed onto the fruit. It also had to break the surface tension of the cutin (the natural waxy, waterproof layer on the fruit) and of course it had to wash off easily when the fruit was harvested. No-one’s going to want an apple that’s covered in talc.”

H. Initial trials in the state of Washington in 2003 showed that when the product was sprayed onto Granny Smith apples, it reduced their surface temperature and lowered the incidence of sunburn by up to 60 per cent. Today the new product, known as Invelop Maximum SPF, is in its second commercial year on the US market. Apple growers are the primary target although Hunter believes grape growers represent another sector with long term potential. He is also hopeful of extending sales to overseas markets such as Australia, South America and southern Europe.

Questions 27-32

*Use the information in the passage to match each use of talc power with correct application from A, **B** or **c.** Write the appropriate letters A-C in boxes **27-32** on your answer sheet.*

NB you may use any letter more than once

A. Fruit protection

B. Chewing gum business

C. Olive oil extraction

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27 Talc is used to increase the size of drops.

28 Talc is applied to reduce foaming.

29 Talc is employed as a filler of base.

30 Talc is modified and prevented sunburn.

31 Talc is added to stop stickiness.

32 Talc is used to increase production.

Questions 33-38

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 33-38 on your answer sheet.

Spanish olive oil industry has been using talc in oil extraction process for about____33____years. It is useful in dealing with difficult olives which often produce high amount of_____34_____because of the high content of solid materials. When smaller factories release _____35_____, it could be_____36_____ to the environment because it is hard to _____37_____ and usually takes time as it contains emulsified oil. However, talc power added in the process is able to absorb the emulsifier oil. It improves the oil extraction production, because with aid of talc powder, size of oil _____38_____ increased.

Question 39-40

Answer the questions below using NO MORE THAN THREE WORDS from the passage for each answer.
*Write your answers in boxes **39-40** on your answer sheet.*

39 In which process is talc used to clear the stickiness of chewing gum?

40 Which group of farmers does **Invelop** intend to target in a long view?

Reading Test 7

Section 1

The Dinosaurs Footprints and Extinction

A. **EVERYBODY** knows that the dinosaurs were killed by an asteroid. Something big hit the earth 65 million years ago and, when the dust had fallen, so had the great reptiles. There is thus a nice, if ironic, symmetry in the idea that a similar impact brought about the dinosaurs' rise. That is the thesis proposed by Paul Olsen, of Columbia University, and his colleagues in this week's Science.

B. Dinosaurs first appear in the fossil record 230m years ago, dining the Triassic period. But they were mostly small, and they shared the earth with lots of other sorts of reptile. It was in the subsequent Jurassic, which began 202million years ago, that they overran the planet and turned into the monsters depicted in the book and movie “Jurassic Park”. (Actually, though, the dinosaurs that appeared on screen were from the still more recent Cretaceous period.) Dr Olsen and his colleagues are not the first to suggest that the dinosaurs inherited the earth as the result of an asteroid strike. But they are the first to show that the takeover did, indeed, happen in a geological eyeblink.

C. Dinosaur skeletons are rare. Dinosaur footprints are, however, surprisingly abundant. And the sizes of the prints are as good an indication of the sizes of the beasts as are the skeletons themselves. Dr Olsen and his colleagues therefore concentrated on prints, not bones.

D. The prints in question were made in eastern North America, a part of the world then full of rift valleys similar to those in East Africa today. Like the modem African rift valleys, the Triassic /Jurassic American ones contained lakes, and these lakes grew and shrank at regular intervals because of climatic changes caused by periodic shifts in the earth's orbit. (A similar phenomenon is responsible for modem ice ages.) That regularity, combined with reversals in the earth's magnetic field, which are detectable in the tiny fields of certain magnetic minerals, means that rocks from this place and period can be dated to within a few thousand years. As a bonus, squish lake-edge sediments are just the things for recording the tracks of passing animals. By dividing the labour between themselves, the ten authors of the paper were able to study such tracks at 80 sites.

E. The researchers looked at 18 so-called **ichnotaxa**. These are recognisable types of footprint that cannot be matched precisely with the species of animal that left them. But they can be matched with a general sort of animal, and thus act as an indicator of the fate of that group, even when there are no bones to tell the story. Five of the ichnotaxa disappear before the end of the Triassic, and four march confidently across the boundary into the Jurassic. Six, however, vanish at the boundary, or only just splutter across it; and three appear from nowhere, almost as soon as the Jurassic begins.

F. That boundary itself is suggestive. The first geological indication of the impact that killed the dinosaurs was an unusually high level of iridium in rocks at the end of the Cretaceous, when the beasts disappear from the fossil record. Iridium is normally rare at the earth's surface, but it is more abundant in meteorites. When people began to believe the impact theory, they started looking for other Cretaceous-end anomalies. One that turned up was a surprising abundance of fern spores in rocks just above the boundary layer—a phenomenon known as a "fern spike"

G. That matched the theory nicely. Many modem ferns are opportunists. They cannot compete against plants with leaves, but if a piece of land is cleared by, say, a volcanic emption, they are often the first things to set up shop there. An asteroid strike would have scoured much of the earth of its vegetable cover, and provided a paradise for ferns. A fem spike in the rocks is thus a good indication that southing terrible has happened.

H. Both an **iridium** anomaly and a fem spike appear in rocks at the end of the Triassic, too. That accounts for the disappearing ichnotaxa: the creatures that made them did not survive the holocaust. The surprise is how rapidly the new ichnotaxa appear.

I. Dr Olsen and his colleagues suggest that the explanation for this rapid increase in size may be a phenomenon called ecological release. This is seen today when reptiles (which, in modem times, tend to be small creatures) reach islands where they face no competitors. The most spectacular example is on the Indonesian island of Komodo, where local lizards have grown so large that they are often referred to as dragons. The dinosaurs, in other words, could flourish only when the competition had been knocked out.

J. That leaves the question of where the impact happened. No large hole in the earth's crust seems to be 202m years old. It may, of course, have been overlooked. Old craters are eroded and buried, and not always easy to find. Alternatively, it may have vanished. Although continental crust is more or less permanent, the ocean floor is constantly recycled by the tectonic processes that bring about continental drift. There is no ocean floor left that is more than 200m years old, so a crater that formed in the ocean would have been swallowed up by now.

K. There is a third possibility, however. This is that the crater is known, but has been misdated. The Manicouagan "structure", a crater in Quebec, is thought to be 214m years old. It is huge—some 100km across—and seems to be the largest of between three and five craters that formed within a few hours of each other as the lumps of a disintegrated comet hit the earth one by one.

Questions 1-6

Do the following statements agree with the information given in Reading Passage 1? In boxes 1-6 on your answer sheet, write

YES	*if the statement agrees with the information*
NO	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1 Dr Paul Olsen and his colleagues believe that asteroid knock may also lead to dinosaurs' boom.

2 Books and movie like *Jurassic Park* often exaggerate the size of the dinosaurs.

3 Dinosaur footprints are more adequate than dinosaur skeletons.

4 The prints were chosen by Dr Olsen to study because they are more detectable than earth magnetic field to track a date of geological precise within thousands years.

5 Ichnotaxa showed that footprints of dinosaurs offer exact information of the trace left by an individual species.

6 We can find more Iridium in the earth's surface than in meteorites.

Questions 7-13

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 7-13 on your answer sheet.

Dr Olsen and his colleagues applied a phenomenon named.....7.....to explain the large size of the Eubrontes, which is a similar case to that nowadays reptiles invade a place where there are no.....8.....; for example, on an island called Komodo, indigenous huge lizards grow so big that people even regarding them as.....9..... However, there were no old impact trace being found? The answer may be that we have .....10..... the evidence. Old craters are difficult to spot or it probably.....11.....due to the effect of the earth moving. Even a crater formed in Ocean had been .....12..... under the impact of crust movement. Beside the third hypothesis is that the potential evidences — some craters may be .....13.....

Section 2

WHAT COOKBOOKS REALLY TEACH US

A. Shelves bend under their weight of cookery books. Even a medium-sized bookshop contains many more recipes than one person could hope to cook m a lifetime. Although the recipes in one book are often similar to those in another, their presentation varies wildly, from an array of vegetarian cookbooks to instructions on cooking the food that historical figures might have eaten. The reason for this abundance is that cookbooks promise to bring about a land of domestic transformation for the user. The daily routine can be put to one side and they liberate the user, if only

temporarily. To follow their instructions is to turn a task which has to be performed every day into an engaging, romantic process. Cookbooks also provide an opportunity to delve into distant cultures without having to turn up at an airport to get there.

B. The first Western cookbook appeared just over 1,600 years ago. De re coquinara (it means concerning cookery[1]) is attributed to a Roman gourmet named Apicius. It is probably a complilation of Roman and Greek recipes, some or all of them drawn from manuscripts that were later lost. The editor was sloppy, allowing several duplicated recipes to sneak in. Yet Apicius's book set die tone of cookery advice in Europe for more than a thousand years. As a cookbook it is unsatisfactory with very basic instructions. Joseph Vehling, a chef who translated Apicius in the 1930s, suggested the author had beat obscure on purpose, in case his secrets leaked out.

C. But a more likely reason is that Apicius's recipes were written by and for professional cooks, who could follow their shorthand. This situation continued for hundreds of years. There was no order to cookbooks: a cake recipe might be followed by a mutton one. But then, they were not written for careful study. Before the 19th century few educated people cooked for themselves.

D. The wealthiest employed literate chefs; others presumably read recipes to their servants. Such cooks would have been capable of creating dishes from the vaguest of instructions. The invention of printing might have been expected to lead to greater clarity but at first the reverse was true. As words acquired commercial value, plagiarism exploded Recipes were distorted through reproduction A recipe for boiled capon in The Good Huswives Jewell, printed in 1596t advised the cook to add three or four dates. By 1653, when the recipe was given by a different author in A Book of Fruits & Flowers, the cook was told to set the dish aside for three or four days.

E. The dominant theme in 16th and 17th century cookbooks was order. Books combined recipes and household advice, on the assumption that a well-made dish, a well-ordered larder and well-disciplined children were equally important. Cookbooks thus became a symbol of dependability in chaotic times. They hardly seem to have been affected by the English civil war or the revolutions in America and France.

F. In the 1850s Isabella Beeton published The Book of Household Management. Like earlier cookery writers she plagiarised freely, lifting not just recipes but philosophical observations from other hooks. If Beetons recipes wore not wholly new, though, the way in which she presented them certainly was. She explains when the chief ingredients are most likely to be in season, how long the dish will take to prepare and even how much it is likely to cost. Beetons recipes were well suited to her times. Two centuries earlier, an understanding of rural ways had been so widespread that one writer could advise cooks to heat water until it was a little hotter than milk comes from a cow. By the 1850b Britain was industrialising. The growing urban midrib class needed details, and Beeton provided them in full.

G. In France, cookbooks were last becoming even more systematic. Compared with Britain, France had produced few books written for the ordinary householder by the end of the 19th century. The most

celebrated French cookbooks were written by superstar chefs who had a clear sense of codifying a unified approach to sophisticated French cooking. The 5,000 recipes in Auguste Escoffiers Le Guide Culinaire (The Culinary Guide), published in 1902, might as well have been written in stone, given the book's reputation among French chefs, many of whom still consider it the definitive reference book.

H. What Escoffier did for French cooking, Fannie Farmer did for American home cooking. She not only synthesised American cuisine; she elevated it to the status of science. 'Progress in civilisation has been accompanied by progress in cookery,' she breezily announced in The Boston Cooking-School Cook Book, before launching into a collection of recipes that sometimes resembles a book of chemistry experiments. She was occasionally over-fussy. She explained that currants should be picked between June 28th and July 3rd, but not when it is raining. But in the main her book is reassuringly authoritative. Its recipes are short, with no unnecessary chat and no unnecessary spices.

I. In 1950 Mediterranean Food by Elizabeth David launched a revolution in cooking advice in Britain. In some ways Mediterranean Food recalled even older cookbooks but the smells and noises that filled David's books were not mere decoration for her recipes. They were the point of her books. When she began to write, many ingredients were not widely available or affordable. She understood this, acknowledging in a later edition of one of her books that even if people could not very often make the dishes here described, it was stimulating to think about them.' David's books were not so much cooking manuals as guides to the kind of food people might well wish to eat.

Questions 14-16

Complete the summary below. Choose NO MORE THAN TWO WORDS firm the passage for each answer. Write your answers inboxes 14-16 on your answer sheet.

Why are there so many cookery books?

There are a great number more cookery books published than is really necessary and it is their 14 .....which makes them differ from each other. There are such large numbers because they offer people an escape from their 15 …….....and some give the user the chance to inform themselves about other 16 .....

Questions 17-21

Reading Passage has nine paragraphs, A-I Which paragraph contains the following information? Write the correct letter, A-I in boxes 17-21 on your answer sheet

NB: ***YOU MAY USE ANY LETTER MORE THAN ONCE.***

17 cookery books providing a sense of stability during periods of unrest

18 details in recipes being altered as they were passed on

19 knowledge which was in danger of disappearing

20 the negative effect on cookery books of a new development

21 a period when there was no need for cookery books to be precise

Questions 22-26

Look at the following statements (Questions 22-26) and list of books (A-E) below. Match each

statement with the correct book. Write the correct letter, A-E, m boxes 22-26 on your answer sheet

22 Its recipes were easy to follow despite the writer's attention to detail.

23 Its writer may have deliberately avoided pawing on details.

24 It appealed to ambitious ideas people have about cooking.

25 Its writer used ideas from other books but added additional related information.

26 It put into print ideas which are still respected today.

List of cookery books

A De re coquinara

B The Book of Household Management

C Le Guide Culinaire

D The Boston Cooking-School Cook Book

E Mediterranean Food

Section 3

Learning lessons from the past

A. Many past societies collapsed or vanished, leaving behind monumental ruins such as those that the poet Shelley imagined in his sonnet, *Ozymandias*. By collapse, I mean a drastic decrease in human population size and/or political/economic/social complexity, over a considerable area, for an extended time. By those standards, most people would consider the following past societies to have been famous victims of full-fledged collapses rather than of just minor declines: the Anasazi and Cahokia within the boundaries of the modem US, the Maya cities in Central America, Moche and Tiwanaku societies in South America, Norse Greenland, Mycenean Greece and Minoan Crete in Europe, Great Zimbabwe in Africa, Angkor Wat and the Harappan Indus Valley cities in Asia, and Easter Island in the Pacific Ocean.

B. The monumental ruins left behind by those past societies hold a fascination for all of us. We marvel at them when as children we first learn of them through pictures. When we grow up, many of **US** plan vacations in order to experience them at first hand. We feel drawn to their often spectacular and haunting beauty, and also to the mysteries that they pose. The scales of the ruins testify to the former wealth and power of their builders. Yet these builders vanished, abandoning the great structures that they had created at such effort. How could a society that was once so mighty end up collapsing?

C. It has long been suspected that many of those mysterious abandonments were at least partly triggered by ecological problems: people inadvertently destroying the environmental resources on which their societies depended. This suspicion of unintended ecological suicide (ecocide) has been confirmed by discoveries made in recent decades by archaeologists, climatologists, historians, paleontologists, and palynologists (pollen scientists). The processes through which past societies have undermined themselves by damaging their environments fall into eight categories,

whose relative importance differs from case to case: deforestation and habitat destruction, soil problems, water management problems, overhunting, overfishing, effects of introduced species on native species, human population growth, and increased impact of people.

D. Those past collapses tended to follow somewhat similar courses constituting variations on a theme. Writers find it tempting to draw analogies between the course of human societies and the course of individual human lives - to talk of a society's birth, growth, peak, old age and eventual death. But that metaphor proves erroneous for many past societies: they declined rapidly after reaching peak numbers and power, and those rapid declines must have come as a surprise and shock to their citizens. Obviously, too, this trajectory is not one that all past societies followed unvaryingly to completion: different societies collapsed to different degrees and in somewhat different ways, while many societies did not collapse at all.

E. Today many people feel that environmental problems overshadow all the other threats to global civilisation. These environmental problems include the same eight that undermined past societies, plus four new ones: human-caused climate change, build up of toxic chemicals in the environment, energy shortages, and full human utilisation of the Earth's photosynthetic capacity. But the seriousness of these current environmental problems is vigorously debated. Are the risks greatly exaggerated, or conversely are they underestimated? Will modem technology solve our problems, or is it creating new problems faster than it solves old ones? When we deplete one resource (eg wood, oil, or ocean fish), can we count on being able to substitute some new resource (eg plastics, wind and solar energy, or farmed fish)? Isn't the rate of human population growth declining, such that we\re already on course for the world's population to level off at some manageable number of people?

F. Questions like this illustrate why those famous collapses of past civilisations have taken on more meaning than just that of a romantic mystery. Perhaps there are some practical lessons that we could learn from all those past collapses. But there are also differences between the modem world and its problems, and those past societies and their problems. We shouldn't be so naive as to think that study of the past will yield simple solutions, directly transferable to our societies today. We differ from past societies in some respects that put US at lower risk than them; some of those respects often mentioned include our powerful technology (ie its beneficial effects), globalisation, modem medicine, and greater knowledge of past societies and of distant modem societies. We also differ from past societies in some respects that put US at greater risk than them: again, our potent technology (ie its unintended destructive effects), globalisation (such that now a problem in one part of the world affects all the rest), the dependence of millions of US on modem medicine for our survival, and our much larger human population. Perhaps we can still learn from the past, but only if we think carefully about its lessons.

Questions 27-29

Choose the correct letter. A, B, c or D.

27. When the writer describes the impact of monumental ruins today, he emphasises

A. the income they generate from tourism.

B. the area of land they occupy.

C. then archaeological value.

D. then romantic appeal.

28. Recent findings concerning vanished civilisations

A. have overturned long-held beliefs.

B. caused controversy amongst scientists.

C. come from a variety of disciplines.

D. identified one main cause of environmental damage.

29. What does the writer say about ways in which former societies collapsed?

A. The pace of decline was usually similar.

B. The likelihood of collapse would have been foreseeable.

C. Deterioration invariably led to total collapse.

D. Individual citizens could sometimes influence the course of events.

Questions 30-34

Do the following statements agree with the views of the writer in Reading Passage ? Write

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

30 It is widely believed that environmental problems represent the main danger faced by the modern world.

31 The accumulation of poisonous substances is a relatively modern problem.

32 There is general agreement that the threats posed by environmental problems are very serious.

33 Some past societies resembled present-day societies more closely than others.

34 We should be careful when drawing comparisons between past and present.

Questions 35-39

Complete each sentence with the correct ending, A-F, below.

Write the correct letter, A-F.

35 Evidence of the greatness of some former civilisations

36 The parallel between an individual's life and the life of a society

37 The number of environmental problems that societies face

38 The power of technology

39 A consideration of historical events and trends

A. is not necessarily valid.

B. provides grounds for an optimistic outlook,

C. exists in the form of physical structures.

D. is potentially both positive and negative.

E. will not provide direct solution for present problems.

F. is greater now than in the past

Question 40

*Choose the correct letter, A, B, **c** or D*

40. What is the main argument of Reading Passage 3?

A. There are differences as well as similarities between past and present societies.

B. More should be done to preserve the physical remains of earlier civilisations.

C. Some historical accounts of great civilisations are inaccurate.

D. Modem societies are dependent on each other for then continuing survival.

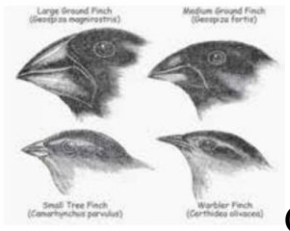
Reading Test 8

Section 1

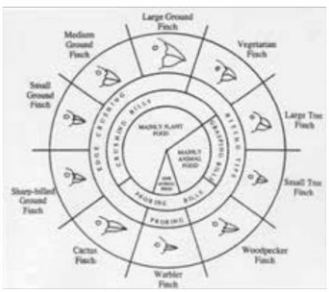
Finches on Islands

A. Today, the quest continues. On Daphne Major —one of the most desolate of the Galápagos Islands, an uninhabited volcanic cone where cacti and shrubs seldom grow higher than a researcher's knee Peter and Rosemary Grant have spent more than three decades watching Darwin's finches respond to the challenges of storms, drought and competition for food. Biologists at Princeton University, the Grants know and recognize many of the individual birds on the island and can trace the birds' lineages back through time. They have witnessed Darwin's principle in action again and again, over many generations of finches.

B. The Grants' most dramatic insights have come from watching the evolving bill of the medium ground finch. The plumage of this sparrow-sized bird ranges from dull brown to jet black. At first glance, it may not seem particularly striking, but among scientists who study evolutionary biology, the medium ground finch is a superstar. Its bill is a middling example in the array of shapes and sizes found among Galapagos finches: heftier than that of the small ground finch, which specializes in eating small, soft seeds, but petite compared to that of the large ground finch, an expert at cracking and devouring big, hard seeds.



C. When the Grants began their study in the 1970s, only two species of finch lived on Daphne Major, the medium ground finch and the cactus finch. The island is so small that the researchers were able to count and catalogue every bird. When a severe drought hit in 1977, the birds soon devoured the last of the small, easily eaten seeds. Smaller members of the medium ground finch population, lacking the bill strength to crack large seeds, died out.



D. Bill and body size are inherited traits, and the next generation had a high proportion of big-billed Individuals. The Grants had documented natural selection at work the same process that over many millennia, directed the evolution of the Galápagos' 14 unique finch species, all descended from a common ancestor that readied the islands a few million years ago.

E. Eight years later, heavy rains brought by an El Nino transformed the normally meager vegetation on

Daphne Ma ị or. vines and other plants that in most years struggle for survival suddenly flourished, choking out the plants that provide large seeds to the finches. Small seeds came to dominate the food supply, and big birds with big bills died out at a higher rate than smaller ones. 'Natural selection is observable/ Rosemary Grant says. 'It happen when the environment changes. When local conditions reverse themselves, so does the direction of adaptation.'

F. Recently, die Grants witnessed another form of natural selection acting on the medium ground finch: competition from bigger, stronger cousins. In 1982, a third finch, the large ground finch, came to live on Daphne Major. The stout bills of these birds resemble the business end of a crescent wrench. Their arrival was the first such colonization recorded on the Galapagos in nearly a century of scientific observation. 'We realized,' Peter Grant says, 'we had a very unusual and potentially important event to follow/ For 20 years, the large ground finch coexisted with the medium ground finch, which shared five supply of large seeds with its bigger-billed relative. Then, in 2002 and 2003, another drought struck. None of the birds nested that year, and many died out. Medium ground finches with large bills, crowded out of feeding areas by the more powerful large ground finches, were hit particularly hard.

G. When wetter weather returned in 2004, and the finches nested again, the new generation of the medium ground finch was dominated by smaller birds with smaller bills, able to survive on smaller seeds. This situation, says Peter Grant, marked the first time that biologists have been able to follow the complete process of an evolutionary change due to competition between, species and the strongest response to natural selection that he had seen in 33 years of tracking Galapagos finches.

H. On the inhabited island of Santa Cruz, just south of Daphne Major, Andrew Hendry of McGill University and Jeffrey Podos of the University of Massachusetts at Amherst have discovered a new, man-made twist in finch evolution. Their study focused on birds living near the Academy Bay research station, on the fringe of the town of Puerto Ayora. The human population of the area has been growing fast—from 900 people in 1974 to 9,582 In 2001. Today Puerto Ayorn is full of hotels and mai tai bars,' Hendry says. 'People have taken tills extremely arid place and tried to turn it Into a Caribbean resort.

I. Academy Bay records dating back to the early 1960s show that medium ground finches captured there had either small or large bills. Very few of the birds had mid-size bills. The finches appeared to be In the early stages of a new adaptive radiation: If the trend continued, the medium ground finch on Santa Cruz could split Into two distinct subspecies, specializing in different types of seeds. But in the late 1960s and early 70s, medium ground finches with medium-sized bills began to thrive at Academy Bay along with small and large-billed birds. The booming human population had introduced new food sources, including exotic plants and bird feeding stations stocked with rice. Billsize, once critical to the fishes' survival, no longer made any difference. 'Now an intermediate bill can do fine/ Hendry says.

J. At a control site distant from Puerto Ayora, and relatively untouched by humane, the medium ground finch population remains split between large- and small-billed birds. On undisturbed parts of Santa Cruz, there Is no ecological niche for a middling medium ground finch, and the birds continue to diversify. In town, though there are still many finches, once-distinct populations are merging.

K. The finches of Santa Cruz demonstrate a subtle process in which human meddling can stop evolution In Its tracks, outing the formation of new species. In a time when global biodiversity continues Its downhill slide, Darwin's finches have yet another unexpected lesson to teach. 'If we hope to regain some of the diversity that's already been lost/ Hendry says, 'we need to protect not just existing creatures, but also the processes that drive the origin of new species.'

You should spend about 20 minutes on question 1-13, which are based on reading passage 1 on the following pages.

Questions 1-4

Complete the table below.

Year	Climate	Finch's condition
1977	1.....	small-beak birds failing to survive,
		without the power to open 2.....
1985	3..... brought	big-beak birds dying out, with
	by El Nino	4.....as the main food resource

Questions 5-8

Choose NO MORE THAN TWO WORDS from Reading Passage 1 for each answer. Write your answers in boxes 1-4 on your answer sheet.

Complete the following summary of the paragraphs of Reading Passage 1, using NO MORE THAN TWO WORDS from the Reading Passage for each answer.

Write your answers in boxes 5-8 on your answer sheet

On the remote island of Santa Cruz, Andrew Hendry and Jeffrey Podos conducted a study on reversal 5.....due to human activity. In the early 1960s medium ground finches were found to have a larger or smaller beak. But in the late 1960b and early 70s, finches with 6.....flourished. The study speculates that it is due to the growing 7.....who brought in alien plants with intermediate-size seeds into the area and the birds ate 8..... sometimes.

Questions 9-13

Do die following statements agree with the information given in Reading Passage 1?

In boxes 9-13 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*

NOT GIVEN	*if the information is not given in the passage*

9 Grants' discovery has questioned Darwin's theory.

10 The cactus finches are less affected by food than the medium ground finch-

11 In 2002 and 2003, all the birds were affected by the drought,

12 The discovery of Andrew Hendry and Jeffrey Podos was the same as that of the previous studies.

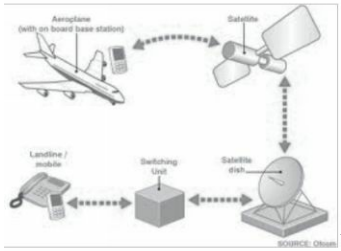
13 It is shown that the revolution in finches on Santa Cruz is likely a response to human intervention.

Section 2

Flight from reality?

Mobiles are barred, but passenger can tap away on their laptops to their heart' content. Is one realty safer than the other? hi the US, a Congressional subcommittee frilled airline representatives and regulators about the issue test month. But the committee heard that using cellphones in planes may indeed pose a risk, albeit a slight one. This would seem to vindicate the treatment of Manchester oil worker Neil Whitehouse, who was sentenced last summer to a year in jail by a British court for refusing to turn off his mobile phone on a flight home from Madrid. Although he was only typing a message to be sent on landing, not actually making a call, the court decided that he was putting the flight at risk.

A. The potential fin problems is certainly there. Modem airliners are packed with electronic devices that control the plane and handle navigation and communications- Each has to meet stringent safeguards to make sure it doesn't emit radiation that would interfere with other devices in the plane-standards that passengers' personal electronic devices don't necessarily meet Emissions from inside the plane could also interfere with sensitive antennae on the fixed exterior.



B. But despite running a numbs of studies, Boeing, Airbus and various government agencies haven't been able to find clear evidence of problems caused by personal electronic devices, inc~~l~~ud~~in~~g mobile phones, "We've done our own studies. We've found cellphones actually have no impact on the navigation system," Bays Maryazme Greczyn, a spokeswoman for Airbus Industries of North America in Herndon, Virginia, Nor do they affect other critical systems, she says. The only impact Airbus found? "Sometimes when a passenger is starting or

finishing a phone call, the pilot hears a very slight beep in the headset," she says.

C. The best evidence yet of a problem comes from a report released this year by Britain's Civil Aviation Authority. Its researchers generated simulated cellphone transmissions inside two Boeing aircraft They concluded that the transmissions could create signals at a power and frequency that would not affect the latest equipment, but exceeded the safety threshold established in 1984 and might therefore affect some of the older equipment on board. This doesn't mean "mission critical" equipment such as the navigation system and flight controls. But the devices that could be affected, such as smoke detectors and fuel level indicators, could still create serious problems for the flight crew if they malfunction.

D. Many planes still use equipment certified to the older standards, says Dan Hawkes, head of avionics at the CAA's Safety Regulation Group. The CAA study doesn't prove the equipment will actually fell when cellphone signals actually cause devices to fail.

E. In 1996, RTCA, a consultant hired by the Federal Aviation Administration in the US to conduct tests, determined that potential problems from personal electronic devices were ''low". Nevertheless, it recommended a ban on their use during "critical" periods of flight, such as take-off and landing. RTCA didn't actually test cellphones, but nevertheless recommended then wholesale ban on flights. But if "better safe than sorry" is the current policy, it's applied inconsistently, according to Marshall Cross, the chairman of MegaWave Corporation, based in Boylston, Massachusetts. Why are cellphones outlawed when no one considers a ban on laptops? "It's like most things in life. The reason is a little bit technical, a little bit economic and a little bit political," says Cross.

F. The company wrote a report for the FAA in 1998 saying it is possible to build an on-board system that can detect dangerous signals from electronic devices. But Cross's personal conclusion is that mobile phones aren't the real threat "You'd have to stretch things pretty far to figure out how a cellphone could interfere with a plane's systems," he says. Cellphones transmit in ranges of around 400, 800 or 1800 megahertz. Since no important piece of aircraft equipment operates at those frequencies, the possibility of interference is very low. Cross says. The use of computers and electronic game systems is much more worrying, he says. They can generate very strong signals at frequencies that could interfere with plane electronics, especially ur a mouse is attached (the wire operates as an antenna or if their built-in shielding is somehow damaged. Some airlines are even planning to put sockets for laptops in seatbacks.

G. There's fairly convincing anecdotal evidence that some personal electronic devices have interfered with systems. Air crew on one flight found that the autopilot was being disconnected, and narrowed the problem down to a passenger's portable computer. They could actually watch the autopilot disconnect when they switched the computer on. Boeing bought the computer, took it to the airline's labs and even tested it on an empty flight. But as with every other reported instance of

interference, technicians were unable to replicate the problem.

H. Some engineers, however, such as Bruce Donham of Boeing, say that common sense suggests phones are more risky than laptops. "A device capable of producing a strong emission is not as safe as a device which does not have any intentional emission," he says. Nevertheless, many experts think it's illogical that cellphones are prohibited when computers aren't. Besides, the problem is more complicated than simply looking at power and frequency. In the air, the plane operates in a soup of electronic emissions, created by its own electronics and by ground-based radiation. Electronic devices in the cabin-especially those emitting a strong signal-can behave unpredictably, reinforcing other signals, for instance, or creating unforeseen harmonics that disrupt systems.

I. Despite the Congressional subcommittee hearings last month, no one seems to be working seriously on a technical solution that would allow passengers to use their phones. That's mostly because no one -besides cellphone users themselves-stands to gain a lot if the phones are allowed in the air. Even the cellphone companies don't want it. They are concerned that airborne signals could cause problems by flooding a number of the networks' base stations at once with the same signal This effect, called big footing, happens because airborne cellphone signals tend to go to many base stations at once, unlike land calls which usually go to just one or two stations. In the US, even if FAA regulations didn't prohibit cellphones in the air, Federal Communications Commission regulations would.

J. Possible solutions might be to enhance airliners' electronic insulation, or to fit detectors which warned flight staff when passenger devices were emitting dangerous signals. But Cross complains that neither the FAA, the airlines nor the manufacturers are showing much interest in developing these. So despite Congressional suspicions and the occasional irritated (or jailed) mobile user, the industry's "better safe than sorry" policy on mobile phones seems likely to continue. In the absence of firm evidence that the international airline industry is engaged in a vast conspiracy to overcharge its customers, a delayed phone call seems a small price to pay for even the tiniest reduction in the chances of a plane crash. But you'll still be allowed to use your personal computer during a flight. And while that remains the case, airlines can hardly claim that logic has prevailed.

Questions 14 - 17

Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 14-17 on your answer sheet.

The would-be risk surly exists, since the avionic systems on modern aircraft are used to manage flight and deal with .....14..... Those devices are designed to meet the safety criteria which should be free from interrupting .....15..... The personal use of mobile phone may cause the sophisticated .....16.....outside of plane to dysfunction. Though definite interference in piloting devices has not been scientifically testified, the devices such as those which detect .....17.....in cabinet could be affected.

Question 18 -22

Use the information in the passage to match the Organization (listed A-E) with opinions or deeds

below. Write the appropriate letters A-E in boxes 18-22 on your answer sheet.

A British Civil Aviation Authority

B Maryanne Greczyn

C RTCA

D Marshall Cross

E Boeing company

---

18 Mobile usages should be forbidden in a specific time.

19 Computers are more dangerous than cell phones.

20 finding that tile mobile phones pose little risk on flight' navigation devices.

21 The disruption of laptops is not as dangerous as cellphones.

22 The mobile signal may have impact on earlier devices.

Questions 23-26

Do the following statements agree with the information given in Reading Paasage2 In boxes 23-26 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*If the statement is false*
NOT GIVEN	*If the information not given in the passage*

23 Almost an scientists accept that cellphones have higher emission than that of personal computers.

24 Some people believe that radio emission win interrupt the equipment on plane.

25 The signal interference-detecting device has not yet been developed because they are in priority far neither administrative department nor offer economic incentive.

26 FAA initiated open debate with Federal Communications Commission.

Section 3

Communicating Conflict!

Section A

As far back as Hippocrates' time (460-370 B.c.) people have tried to understand other people by characterizing them according to personality type or temperament. Hippocrates believed there woe four different body Quids that influenced four basic types of temperament. His work was further developed 500 years later by Galem. These days there are any number of self-assessment tools that relate to die basic descriptions developed by Galen, although we no longer believe the source to be the types of body fluid that dominate our systems.

Section B

The values in self-assessments that help determine personality style. Learning styles, communication styles, conflict-handling styles, or other aspects of individuals is that they help depersonalize conflict in interpersonal relationships. The depersonalization occurs when you realize that others aren't trying to be difficult, but they need different or more information than you do. They're not intending to be rude: they are so focused on the task they forget about greeting people. They would like to work faster but not at the risk of damaging the relationships needed to get the job done. They understand there is a job to do. But it can only be done right with the appropriate information, which takes time to collect When used appropriately, understanding communication styles can help resolve conflict on teams. Very rarely are conflicts true personality issues. Usually they are issues of style, information needs, or focus.

Section C

Hippocrates and later Galen determined there woe four basic temperaments: sanguine, phlegmatic, melancholic and choleric. These descriptions were developed centuries ago and are still somewhat apt, although you could update the wording, in today's world, they translate into the four fairly common communication styles described below:

Section D

The sanguine person would be the expressive or spirited style of communication. These people speak in pictures. They invest a lot of emotion and energy in their communication and often speak quickly. Putting their whole body into it. They are easily sidetracked onto a story that may or may not illustrate the point they arc trying to make. Because of their enthusiasm, they are great team motivators. They are concerned about people and relationships. Their high levels of energy can come on strong at times and their focus is usually on the bigger picture, which means they sometimes miss the details or the proper order of things. These people find conflict or differences of opinion invigorating and love to engage in a spirited discussion. They love change and arc constantly looking for new and exciting adventures.

Section E

Tile phlegmatic person - cool and persevering - translates into the technical or systematic communication style. This style of communication is focused on facts and technical details. Phlegmatic people have an orderly, methodical way of approaching tasks, and their focus is very much on the task, not on the people, emotions, or concerns that the task may evoke. The focus is also more on the details necessary to accomplish a task.

Sometimes the details overwhelm the big picture and focus needs to be brought back to the context of the task. People with this style think the facts should speak for themselves, and they are not as comfortable with conflict. They need time to adapt to change and need to understand both the logic of it and the steps involved.

Section F

Tile melancholic person who is softhearted and oriented toward doing things for others translates into the considerate or sympathetic communication style. A person with this communication style is focused on people and relationships. They are good listeners and do things for other people- sometimes to the detriment of getting things done for themselves. They want to solicit everyone's opinion and make sure everyone is comfortable with whatever is required to get the job done. At times this focus on others can distract from the task at hand. Because they are so concerned with the needs of others and smoothing over issues, they do not like conflict. They believe that change threatens the status quo and tends to make people feel uneasy, so people with this communication style, like phlegmatic, people need time to consider the changes in order to adapt to them.

Section G

The choleric temperament translates into the bold or direct style of communication. People with this style are brief in their communication - the fewer words the better. They are big picture thinkers and love to be involved in many things at once. They are focused on tasks and outcomes and often forget that the people involved in carrying out the tasks have needs. They don't do detail work easily and as a result can often underestimate how much time it takes to achieve the task. Because they are so direct, they often seem forceful and can be very intimidating to others. They usually would welcome someone challenging them. But most other styles are afraid to do so. They also thrive on change, the more the better.

Section **H**

A well-functioning team should have all of these communication styles for true effectiveness. All teams need to focus on the task, and they need to take care of relationships in order to achieve those tasks. They need the big picture perspective or the context of their work, and they need the details to be identified and taken care of for success. We all have aspects of each style within us**.** Some of us can easily move from one style to another and adapt our style to the needs of the situation at hand- whether the focus is on tasks or relationships. For others, a dominant style is very evident, and it is more challenging to see the situation from the perspective of another style.

The work environment can influence communication styles either by the type of work that is required or by the predominance of one style reflected in that environment. Some people use one style at work and another at home. The good news about communication styles is that we ah have the ability to develop flexibility in our styles. The greater the flexibility we have, the more skilled we usually are at handling possible and actual conflicts. Usually it has to be relevant to **US** to do so, either because we think it is important or because there are incentives in our environment to encourage it. The key is that we have to want to become flexible with our communication style. As Henry Ford said, "Whether you think you can or you can't, you're right!"

Questions 27-34

Reading Passage 3 has eight sections A-H.

Choose the correct heading for each section from the list of headings below. Write the correct number I-X in boxes 27-34 on your answer sheet.

List of Headings

i Different personality types mentioned

ii recommendation of combined styles for group

iii Historical explanation of understanding personality

iv A lively and positive attitude person depicted

V A personality likes challenge and direct communication

vi different characters illustrated

vii Functions of understanding communication styles

viii Cautious and considerable person cited

ix Calm and Factual personality illustrated

x Self-assessment determines one's temperament

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27 Section A

28 Section B

29 Section C

30 Section D

31 Section E

32 Section F

33 Section G

34 Section H

Questions 35-39

Do the following statements agree with the information given in Reading Passage 1 In boxes 35-39 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

35 it is believed that sanguine people do not like variety

36 Melancholic and phlegmatic people have similar characteristics

37 It is the sanguine personality that needed most in the workplace.

38 It is possible for someone to change type of personality.

39 work surrounding can affect which communication style is the most effective.

Question 40

Choose the correct letter A, B, c or D.

Write your answers in box 40 on your answer sheet.

The author thinks self-assessment tools can be able to

A. assist to develop one's personality in a certain scenario.

B. help to understand colleagues and resolve problems

C. improve relationship with boss of company

D. change others behaviour and personality

Reading Test 9

Section 1

Agriculture and Tourism

A. Linkages between the Agri-Food Sector and Tourism offer significant opportunities for the development of both sectors within the region. These linkages could lead to ensuring the sustainability of the region's tourism product thus ensuring it preservation. Agriculture and tourism — two of Wisconsin's most industries — are teaming up in southwestern Wisconsin has found that tourists, rural communities, and some farmers could benefit from stronger efforts to promote and market agricultural tourism there. In 1990, agricultural tourism project members surveyed 290 visitors to the annual Monroe Cheese Festival and 164 visitors to the Picnic on the Farm, a one-time event held in Platteville in conjunction with the Chicago Bears summer training camp. More than one-half of those surveyed responded favorably to a proposed tour, saying they would be interested in participating in some type of agricultural tour in southwestern Wisconsin. Survey respondents reported that they would prefer to visit cheese factories, sausage processing plants, dairy farms, and historical farm sites, as well as enjoy an old-fashioned picnic dinner. The study also found strong interest in visiting specialty farms (strawberries, cranberries, poultry, etc.). More than 75 percent of the Cheese Day visitors planned ahead for the trip, with 37 percent planning at least two months in advance.

B. More than 40 percent of the visitors came to Monroe for two- or three-day visits. Many stopped at other communities on their way to Cheese Days. Visitors at both events indicated that they were there to enjoy themselves and were willing to spend money on food and arts and crafts. They also wanted the opportunity to experience the "country" while there. The study found that planning around existing events should take into account what brought visitors to the area and provide additional attractions that will appeal to them. For example, visitors to Cheese Days said they were on a holiday and appeared to be more open to various tour proposals. Picnic visitors came specifically to see the Chicago Bears practice. They showed less interest in a proposed agricultural tour than Cheese Day visitors, but more interest in a picnic dinner.

C. The study identified three primary audiences for agricultural tourism: 1) elderly people who take bus tours to see the country; 2) families interested in tours that could be enjoyed by both parents and children; and 3) persons already involved in agriculture, including international visitors. Agricultural tourism can serve to educate urban tourists about the problems and

challenges facing farmers, says Andy Lewis, Grant county community development agent. While agriculture is vital to Wisconsin, more and more urban folk are becoming isolated from the industry. In fact, Lewis notes, farmers are just as interested in the educational aspects of agricultural tours as they are in any financial returns.

D. "Farmers feel that urban consumers are out of touch with farming," Lewis says. "If tourists can be educated on issues that concern farmers, those visits could lead to policies more favorable to agriculture." Animal rights and the environment are examples of two issues that concern both urban consumers and farmers. Farm tours could help consumers get the farmer's perspective on these issues, Lewis notes. Several Wisconsin farms already offer some type of learning experience for tourists. However, most agricultural tourism enterprises currently market their businesses independently, leading to a lack of a concerted effort to promote agricultural tourism as an industry.

E. Lewis is conducting the study with Jean Murphy, assistant community development agent. Other participants include UW-Platteville Agricultural Economist Bob Acton, the Center for Integrated Agricultural Systems, UW-Extension Recreation Resources Center, the Wisconsin Rural Development Center, and Hidden Valleys, a Southwestern Wisconsin regional tourism organization. This past fall, Murphy organized several workshops with some Green and Grant County farmers, local business leaders, and motor coach tour operators to discuss how best to organize and put on farm tours. Committees were formed to look at the following: tour site evaluations, inventory of the area's resources, tour marketing, and familiarization of tours. The fourth committee is organizing tours for people such as tour bus guides and local reporters to help better educate them about agricultural tourism. Green County farmers already have experience hosting visitors during the annual Monroe Cheese Days. Green county Tourism Director Larry Lindgren says these farmers are set to go ahead with more formal agricultural tours next year. The tours will combine a farm visit with a visit to a local cheese factory and a picnic lunch.

F. Another farm interested in hosting an organized tour is Sinsinawa, a 200-acre Grant County farm devoted to sustainable agriculture and run by the Dominican Sisters. Education plays a major role at the farm, which has an orchard, dairy and beef cows, and hogs. Farm tours could be combined with other activities in the area such as trips to the Mississippi River and/or visits to historical towns orlandmarks, Lewis says. The project will help expose farmers to the tourism industry and farm vacations as a way to possibly supplement incomes, he adds. While farm families probably wouldn't make a lot of money through farm tours, they would be compensated for their time, says Lewis. Farmers could earn additional income through the sale of farm products, crafts, and recreational activities.

Questions 1-4

The reading Passage has six paragraphs A-F.

Which paragraph contains the following information? Write the correct letter A-F, inboxes *1-4* on your answer sheet.

1 About half of all the tourists would spend several days in Monroe.

2 Most visitors responded positively to a survey project on farm tour.

3 Cooperation across organisations in research for agriculture tours has been carried out.

4 Agriculture tour assist tourists to understand more issues concerning animal and environment.

Questions 5-9

Which of following statements belongs to the visitor categories in the box Please choose A, B or c for each question.

Write the correct letter A, B or C, in boxes 5-9 on your answer sheet.

NB: You may use any letter more than once.

A Cheese Festival visitors

B Picnic visitors

C Both of them

---

5 have focused destination

6 majority prepare well before going beforehand.

7 are comparably less keen on picnic meal

8 show interest in activities such as visiting factory tour and fruit

9 are willing to accept a variety of tour recommendation.

Questions 10-14

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes ***10-14*** *on your answer sheet.*

Through farm tour, visitors can better understand significant issues such as .....10..... and enviroment. In autumn, Murphy organised .....11..... and bring other participants together to develop local tour market. Larry Lindgren said the farmers already had experience of farm tours with factory visiting and a.....12..... In *Sinsinawa,* a large area of the farmland contains an orchard, cow etc which is managed and operated by.....13.....; Lewis said the project will probably bring extra.....14.....for local farmers.

Section 2

Cosmetics in Ancient Past

Since cosmetics and perfumes are still in wide use today, it is interesting to compare the attitudes, customs and beliefs related to them in ancient times to those of our own day and age. Cosmetics and perfumes have been popular since tile dawn of civilization; it is shown by the discovery of a great deal of pertinent archeological material, dating from the third millennium BC. Mosaics, glass perfume flasks, stone vessels, ovens, cooking-pots, clay jars, etc., some inscribed by the hand of the artisan. Evidence also appears in the Bible and other classical writings, where it is written that spices and perfumes were prestigious products known throughout the ancient world and coveted by kings and princes. The written and pictorial descriptions, as well as archaeological findings, all show how important body care and aesthetic appearance were in the lives of the ancient people. The chain of evidence spans many centuries, detailing the usage of cosmetics in various cultures from the earliest period of recorded history.

In antiquity, however, at least in the onset, cosmetics served in religious ceremonies and for healing purposes. Cosmetics were also connected with cultic worship and witchcraft: to appease the various gods, fragrant ointments were applied to the statuary images and even to their attendants. From this, in the course of time, developed the custom of personal use, to enhance the beauty of the face and the body, and to conceal defects.

Perfumes and fragrant spices were precious commodities in antiquity, very much in demand, and at times even exceeded silver and gold in value. Therefore, they were luxury products, used mainly in the temples and in the homes of the noble and the wealthy. The Judean kings kept them in treasure houses (2 Kings 20:13).

And the Queen of Sheba brought to Solomon "camels laden with spices, gold in great quantity and precious stones. (1 Kings 10:2,10). However, within time, the use of cosmetics became the custom of that period. The use of cosmetics became widespread among the lower classes as well as among the wealthy; in the same way they washed the body, 80 they used to care for the body with substances that softened the skin and anoint it with fragrant oils and ointments.

Facial treatment was highly developed and women devoted many horns to it They used to spread various scented creams on the face and to apply makeup in vivid and contrasting colors. An Egyptian papyrus from the 16th century BC contains detailed recipes to remove blemishes, wrinkles, and other signs of age. Greek and Roman women would cover their faces in the evening with a “beauty mask” to remove blemishes, which consisted mainly of flour mixed with flagrant spices, leaving it on their face all night. The next morning they would wash it off with asses' milk. The very common creams used by women in the ancient Far East, particularly important in the hot climate and prevalent in that area of the globe, were made up of oils and aromatic scents. Sometimes the oil in these creams was extracted from olives, almonds, gourds, sesame, or from trees and plants; but, for those of limited means, scented animal and fish fete were commonly used.

Women in the ancient past commonly put colors around their eyes. Besides beautification, its purpose

was also medicinal as covering the sensitive skin of the lids with colored ointments that prevailed dryness and eye diseases: the eye-paint repelled the little flies that transmitted eye inflammations. Egyptian women colored tile upper eyelid black and the lower one green, and painted the space between the upper lid and the eyebrow gray or blue. The women of Mesopotamia favored yellows and reds. The use of kohl for painting the eyes is mentioned three times in the Bible, always with disapproval by the sages (2 Kings, 9:30; Jersniah 4:30; Ezekiel 23:40). In contrast. Job named one of his daughters "Kerai Happukh" — "ham of eye paint" (Job 42:14).

Great importance was attached to the care for hair in ancient times. Long hair was always considered a symbol of beauty, and kings, nobles and dignitaries grew their hair long and kept it well-groomed and cared for. Women devoted much time to the style of the hair; while not cutting, they would apply much care to it by arranging it skillfully in plaits and "building it up" sometimes with the help of wigs. Egyptian women generally wore their hair flowing down to their shoulders or even longer. In Mesopotamia, women cherished long hair as a part of their beauty, and hair flowing down their backs in a thick plait and tied with a ribbon is seen in art. Assyrian women wore their hair shorter, braiding and binding it in a bun at the back. In Ancient Israel, brides would wear their hair long on the wedding day as a sign of their virginity. Ordinary people and slaves, however, usually wore their hair short, mainly for hygienic reasons, since they could not afford to invest in the kind of treatment that long hair required.

From the Bible and Egyptian and Assyrian sources, as well as the words of classical authors, it appears that the centers of the trade in aromatic resins and incense were located in the kingdoms of Southern Arabia, and even as far as India, where some of these precious aromatic plants were grown. "Dealers from Sheba and Rammah dealt with you, offering the choicest spices..." (Ezekiel 27:22). The Nabateans functioned as the important middlemen in this trade; Palestine also served as a very important component, as the trade routes crisscrossed the country. It is known that the Egyptian Queen Hatsheput (15th century BC) sent a royal expedition to the Land of Punt (Somalia) in order to bring back myrrh seedlings to plant in her temple. In Assyrian records of tribute and spoils of war, perfumes and resins are mentioned; the text from the time of Tukulti-Ninurta II (890-884 BC) refers to balls of myrrh as part of the tribute brought to the Assyrian king by the Aramaean kings. The trade in spices and perfumes is also mentioned in the Bible as written in Genesis (37:25-26), "Camels carrying gum tragacanth and balm and myrrh".

Questions 15-21

Reading Passage 2 has 7 paragraphs A-G.

Which paragraph contains the following information?

Write your answers in boxes 15-21 on your answer sheet.

15 recipes to conceal facial defects caused by aging

16 perfumes were presented to conquerors in war

17 long hair of girls had special meanings in marriage

18 evidence exists in abundance showing cosmetics use in ancient times

19 protecting eyes from fly-transmitted diseases

20 from witchcraft to beautification

21 more expensive than gold

Questions 22-27

Do the following statements are agree with the information give in Reading Passive 2? In boxes 22-27 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*If the statement is false*
NOTGIVEN	*If the information is not given the passive*

22 The written record for cosmetics and perfumes dates back to the third millennium BG

23 Since perfumes and spices woe luxury products, their use was exclusive to the noble and the wealthy.

24 In ancient Far East, fish fata woe used OS cream by women from poor households.

25 The teachings in the Bible were repeatedly against the use of kohl for painting the eye».

26 Long hair as a symbol of beauty was worn solely by women of ancient cultures

27 The Egyptian Queen Hataheput sent a royal expedition to Font to establish a trade route for myrrh

Section 3

Asian Space 2 Satellite Technology

The space age began with the launch of the Russian artificial satellite Sputnik in 1957 and developed further with the race to the moon between the United States and Russia. This rivalry was characterized by advanced technology and huge budgets. In this process there were spectacular successes, some failures, but also many spin-offs.

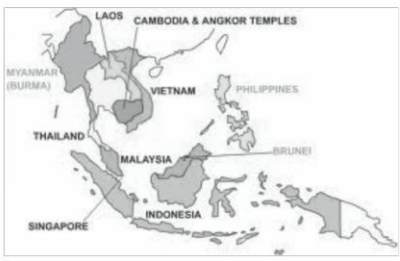
Europe, Japan, China, and India quickly joined this space club of the superpowers. With the advent of relatively low cost high performance mini-satellites and launchers, the acquisition of indigenous space capabilities by smaller nations in Asia has become possible. How, in what manner, and for what purpose will these capabilities be realized?

A. Rocket technology has progressed considerably since the days of ‘fire arrows' (bamboo poles filled with gunpowder) first used in China around 500 BC, and, during the Sung Dynasty, to repel Mongol invaders at the battle of Kaifeng (Kai-fung fu) in AD 1232. These ancient rockets stand in stark contrast to the present-day Chinese rocket launch vehicles, called the ‘Long March' , intended to place a Chinese astronaut in space by 2005 and, perhaps, to achieve a Chinese moon-landing by the end of the decade.

B. In the last decade there has been a dramatic growth in space activities in Asia both in the utilization of space-based services and the production of satellites and launchers. This rapid expansion has led many commentators and analysts to predict that Asia will become a world space power. The space age has had dramatic affects worldwide with direct developments in space technology influencing telecommunications, meteorological forecasting, earth resource and environmental monitoring, and disaster mitigation (flood, forest fires, and oil spills). Asian nations have been particularly eager to embrace these developments.

C. New and innovative uses for satellites are constantly being explored with potential revolutionary effects, such as in the field of health and telemedicine, distance education, crime prevention (piracy on the high seas), food and agricultural planning and production (rice crop monitoring). Space in Asia is very much influenced by the competitive commercial space sector, the emergence of low cost mini-satellites, and the globalization of industrial and financial markets. It is not evident how Asian space will develop in the coming decades in the face of these trends. It is, however, important to understand and assess the factors and forces that shape Asian space activities and development in determining its possible consequences for the region.

D. At present, three Asian nations, Japan, China, and India, have comprehensive end-to-end space capabilities and possess a complete space infrastructure: space technology, satellite manufacturing, rockets, and spaceports. Already self-sufficient in terms of satellite design and manufacturing, South Korea is currently attempting to join then ranks with its plans to develop a launch site and spaceport. Additionally, nations in Southeast Asia as well as those bordering the Indian subcontinent (Nepal, Pakistan, and Bangladesh) have, or are starting to develop, indigenous space programmes. The Association of Southeast Asian Nations (ASEAN) has, in varying degrees, embraced space applications using foreign technology and over the past five years or so its space activities have been expanding. Southeast Asia is predicted to become the largest and fastest growing market for commercial space products and applications, driven by telecommunications (mobile and fixed services), the Internet, and remote sensing applications. In the development of this technology, many non-technical factors, such as economics, politics, culture, and history, interact and play important roles, which in turn affect Asian technology.



E. Asia, and Southeast Asia in particular, suffers from a long list of recurrent large-scale environmental problems including storms and flooding, forest fires and deforestation, and crop failures. Thus the space application that has attracted the most attention in this region is remote sensing. Remote sensing satellites equipped with instruments to take photographs

of the ground at different wavelengths provide essential information for natural resource accounting, environmental management, disaster prevention and monitoring, land-use mapping, and sustainable development planning. Progress in these applications has been rapid and impressive. ASEAN members, unlike Japan, China, and India, do not have then own remote sensing satellites, however most of its member nations have facilities to receive, process, and interpret such data from American and European satellites. In particular, Thailand, Malaysia, and Singapore have world-class remote sensing processing •facilities and research programmes. ASEAN has plans to develop (and launch) its own satellites and in particular remote sensing satellites. Japan is regarded as the dominant space power in Asia and its record of successes and quality of technologies are equal to those of the West In view of the technological challenges and high risks involved in space activities, a very long, and expensive, learning curve has been followed to obtain those successes achieved. Japan' s satellite manufacturing was based on the old and traditional defense and military procurement methodologies as practiced in the US and Europe.

F. In recent years there have been fundamental changes in the way satellites are designed and built to drastically reduce costs. The emergence of 'small satellites' and then quick adoption by Asian countries as a way to develop low-cost satellite technology and rapidly establish a space capability has given these countries the possibility to shorten their learning curve by a decade or more. The global increase of technology transfer mechanisms and use of readily available commercial technology to replace costly *space* and military standard components may very well result in a highly competitive Asian satellite manufacturing industry.

G. The laws of physics ore the same to Tokyo as in Toulouse, and toe principles of electronics and mechanics know no political or cultural boundaries. However, no such immutability applies to engineering practices and management; they are -very much influenced by education, culture, and history. These factors, in turn, have an affect on costs, lead times, product designs and, eventually, international sales, Marty Aston nations are sending their engineers to be trained in the fast Highly experienced, they return to work in toe growing Aslan space industry. Mil this acquisition of technical expertise, coupled perhaps with the world-renowned Japanese manufacturing and management techniques, be applied to build world-class satellites and reduce costs?

Questions 28-32

The reading passage has seven paragraphs, A-G

List of Headings

i Western countries provide essential assistance

ii Unbalanced development for an essential space technology

iii Innovative application compelled by competition

iv An ancient invention which is related to the future

v Military purpose of satellite

vi Rockets for application in ancient China

vii Space development in Asia in the past

viii Non-technology factors counts

ix competitive edge gained by more economically feasible satellite

Choose the correct heading for paragraphs A-G from the list below. Write the correct number, i-ix, in boxes 28-32 on your answer sheet.

28 Paragraph A

29 Paragraph B

30 Paragraph C

Paragraph D **Example: Current space technology development in Asia**

31 Paragraph E

32 Paragraph F

Questions 33-36

Match the following reasons for each question according to the information given in the passage

Write the correct letter A-F, in boxes 33-36 on your answer sheet.

A Because it helps administrate the crops.

B Because there are some unapproachable areas, c Because the economic level in that area is low.

D Because there are influences from some other social factors.

E Because it can be used in non-peaceful purpose.

F Because disasters such as bush fire happened in Southeast Asia.

---

33 Why ***remote-photographic technology*** is used to resolve environmental problems?

34 Why satellites technology is used in medicine area?

35 Why Asian countries satellite technology is limited for development?

36 Why satellites technology is deployed in agricultural area?

Questions 37-40

Do the following statements agree with the information given in Reading Passage 3 In boxes 37-40 on your answer sheet, write

TRUE	*if the Statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

37 Ancient China had already deployed rockets as a military purpose as early as 500 years ago.

38 Space technology has enhanced literacy of Asia.

39 photos taken by satellites with certain technology help predict some natural catastrophes prevention and surveillance.

40 commercial competition constitutes a boosting factor to Asian technology development.

Reading Test 10

Section 1

Koalas

A. Koalas are just too nice for their own good. And except for the occasional baby taken by birds of prey, koalas have no natural enemies. In an ideal world, the life of an arboreal couch potato would be perfectly safe and acceptable.

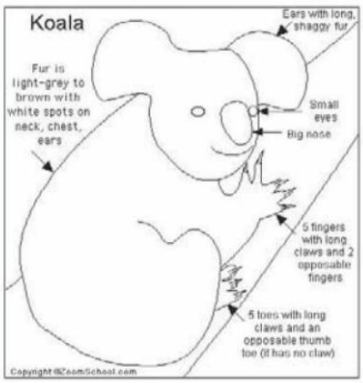
B. Just two hundred years ago, koalas flourished across Australia. Now they seem to be in decline, but exact numbers are not available as the species would not seem to be 'under threat'. Their problem, however, has been man, more specifically, the white man. Koala and aborigine had co-existed peacefully for centuries.

C. Today koalas are found only in scattered pockets of southeast Australia, where they seem to be at risk on several fronts. The koala's only food source, the eucalyptus tree has declined. In the past 200 years, a third of Australia's eucalyptus forests have disappeared. Koalas have been killed by parasites, chlamydia epidemics and a tumour-causing retro-virus. And every year 11000 are killed by cars, ironically most of them in wildlife sanctuaries, and thousands are killed by poachers. Some are also taken illegally as pets. The animals usually soon die, but they are easily replaced.

D. Bush fires pose another threat. The horrific ones that raged in New South Wales recently killed between 100 and 1000 koalas. Many that were taken into sanctuaries and shelters were found to have burnt their paws on the glowing embers. But zoologists say that the species should recover. The koalas will be aided by the eucalyptus, which grows quickly and is already burgeoning forth after the fires. So the main problem to their survival is their slow reproductive rate - they produce only one baby a year over a reproductive lifespan of about nine years.

E. The latest problem for the species is perhaps more insidious. With plush, grey fur, dark amber eyes and button nose, koalas are cuddliness incarnate. Australian zoos and wildlife parks have taken advantage of their uncomplaining attitudes, and charge visitors to be photographed hugging the furry bundles. But people may not realise how cruel this is, but because of the koala's delicate disposition, constant handling can push an already precariously balanced physiology over the

edge.


Koala
Ears with long, shaggy fur
Fur is light-grey to brown with white spots on neck, chest, ears
Small eyes
Big nose
5 fingers with long claws and 2 opposable fingers
5 toes with long claws and an opposable thumb toe (it has no claw)

F. Koalas only eat the foliage of certain species of eucalyptus trees, between 600 and 1250 grams a day. The tough leaves are packed with cellulose, tannins, aromatic oils and precursors of toxic cyanides. To handle this cocktail, koalas have a specialised digestive system. Cellulose-digesting bacteria in the break down fibre, while a specially adapted gut and liver process the toxins. To digest their food properly, koalas must sit still for 21 hours every day.

G. Koalas are the epitome of innocence and inoffensiveness. Although they are capable of ripping open a man's arm with their needle-sharp claws, or giving a nasty nip, they simply wouldn't. If you upset a koala, it may blink or swallow, or hiccup. But attack? No way! Koalas are just not aggressive. They use their claws to grip the hard smooth bark of eucalyptus trees.

H. They are also very sensitive, and the slightest upset can prevent them from breeding, cause them to go off their food, and succumb to gut infections. Koalas are stoic creatures and put on a brave face until they are at death's door. One day they may appear healthy, the next they could be dead. Captive koalas have to be weighed daily to check that they are feeding properly. A sudden loss of weight is usually the only warning keepers have that their charge is ill. Only two keepers plus a vet were allowed to handle London Zoo's koalas, as these creatures are only comfortable with people they know. A request for the koala to be taken to meet the Queen was refused because of the distress this would have caused the marsupial. Sadly, London’s Zoo no longer has a koala. Two years ago the female koala died of a cancer caused by a retrovirus. When they come into heat, female koalas become more active, and start losing weight, but after about sixteen days, heat ends and the weight piles back on. London's koala did not. Surgery revealed hundreds of pea-sized tumours.

Almost every zoo in Australia has koalas - the marsupial has become the Animal Ambassador of the nation, but nowhere outside Australia would handling by the public be allowed. Koala cuddling screams in the face of every rule of good care. First, some zoos allow koalas to be passed from stranger to stranger, many children who love to squeeze. Secondly, most people have no idea of how to handle the animals; they like to cling on to their handler, all in their own good time and use his or her arm as a tree. For such reasons, the Association of Fauna and Marine parks, an Australian conservation society is campaigning to ban koala cuddling. Policy on koala handling is determined by state government authorities. "And the largest of the numbers in the Australian Nature Conservation Agency, with the aim of instituting national guidelines. Following a wave of publicity, some zoos and

wildlife parks have stopped turning their koalas into photo.

Questions 1-5

Choose the correct letter, ***A,*** *B,* ***c*** *or D.*

Write the correct letter in boxes 1-5 on your answer sheet.

1. The main reason why koala declined is that they are killed EXCEPT FOR

A by poachers

B by diseases they got

C giving too many birth yet survived little!

D accidents on the road

2. What can help koalas folly digest their food?

A toxic substance in the leaves

B organs that dissolve the fibres

C remaining inactive for a period to digest

D eating eucalyptus trees

3. What would koalas do when facing the dangerous situation?

A show signs of being offended

B counter attack furiously

C use sharp claws to rip the man

D use claws to grip the bark of trees.

4. In what ways Australian zoos exploit koalas?

A encourage people to breed koalas as pets

B allow tourists to hug the koalas

C put them on the trees as a symbol

D establish a koala campaign

5. What would the government do to protect koalas from being endangered?

A introduce koala protection guidelines

B close some of the zoos

C encourage people to resist visiting the zoos

D persuade the public to learn more knowledge

Questions 6-12

Do the following statements agree with the information given in Reading Passage 1

In boxes 6-12 on your answer sheet, write

YES	*if the Statement is true*

NO	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

6 new coming human settlers caused danger to koalas.

7 Koalas can still be seen in most of the places in Australia.

8 it takes decade for the eucalyptus trees to recover after the fire.

9 Koalas will fight each other when food becomes scarce.

10 It is not easy to notice that koalas are ill.

11 Koalas are easily infected with human contagious disease via cuddling

12 Koalas like to hold a person's arm when they are embraced.

Questions 13

Choose the correct letter, A, B, c or D.

Write the correct letter in boxes 13 on your answer sheet.

From your opinion this article written by

A a journalist who write for magazine

B a zoo keeper in London Zoo.

C a tourist who traveling back from Australia

D a government official who studies koalas to establish a law

Section 2

Antarctica - in from the cold?

(Updated version)

A. A little over a century ago, men of the ilk of Scott, Shackleton and Mawson battled against Antarctica's blizzards, cold and deprivation. In the name of Empire and in an age of heroic deeds they created an image of Antarctica that was to last well into the 20th century - an image of remoteness, hardship, bleakness and isolation that was the province of only the most courageous of men. The image was one of a place removed from everyday reality, of a place with no apparent value to anyone.

B. As we enter the 21st century, our perception of Antarctica has changed.

Although physically Antarctica is no closer and probably no warmer, and to spend time there still demands a dedication not seen in ordinary life, the continent and its surrounding ocean are increasingly seen to an integral part of Planet Earth, and a key component in the Earth System. Is this because the world seems a little smaller these days, shrunk by TV and tourism, or is it because Antarctica really does occupy a central spot on Earth's mantle? Scientific research during the past half century has revealed - and continues to reveal – that Antarctica's great mass and low temperature exert a major influence on climate and ocean circulation, factors which influence the lives of millions of people all over the globe.

C. Antarctica was not always cold. The slow break-up of the super-continent Gondwana with the northward movements of Africa, South America, India and Australia eventually created enough space around Antarctica for the development of an Antarctic Circumpolar Current (ACC), that flowed from west to east under the influence of the prevailing westerly winds. Antarctica cooled, its vegetation perished, glaciation began and the continent took on its present-day appearance. Today the ice that overlies the bedrock is up to 4km thick, and surface temperatures as low as -89.2deg **c** have been recorded. The icy blast that howls over the ice cap and out to sea -the so-called katabatic wind - can reach 300 km/hr, creating fearsome wind chill effects.

D. Out of this extreme environment come some powerful forces that reverberate around the world. The Earth's rotation, coupled to the generation of cells of low pressure off the Antarctic coast, would allow Astronauts a view of Antarctica that is as beautiful as it is awesome. Spinning away to the northeast, the cells grow and deepen, whipping up the Southern Ocean into the mountainous seas so respected by mariners. Recent work is showing that the temperature of the ocean may be a better predictor of rainfall in Australia than is the pressure difference between Darwin and Tahiti - the Southern Oscillation Index. By receiving more accurate predictions, graziers in northern Queensland are able to avoid overstocking in years when rainfall will be poor. Not only does this limit their losses but it prevents serious pasture degradation that may take decades to repair. CSIRO is developing this as a prototype forecasting system, but we can confidently predict that as we know more about the Antarctic and Southern Ocean we will be able to enhance and extend our predictive ability.

E. The ocean's surface temperature results from the interplay between deepwater temperature, air temperature and ice. Each winter between 4 and 19 million square km of sea ice form, locking up huge quantities of heat close to the continent. Only now can we start to unravel the influence of sea ice on the weather that is experienced in southern Australia. But in another way the extent of sea ice extends its influence far beyond Antarctica. Antarctic krill - the small shrimp-like crustaceans that are the staple diet for baleen whales, penguins, some seals, flighted sea birds and many fish - breed well in years when sea ice is extensive and poorly when it is not. Many species of baleen whales and flighted sea birds migrate between the hemispheres and when the krill are less abundant they do not thrive.

F. The circulatory system of the world's oceans is like a huge conveyor belt, moving water and

dissolved minerals and nutrients from one hemisphere to the other, and from the ocean's abyssal depths to the surface. The ACC is the longest current in the world, and has the largest flow. Through it, the deep flows of the Atlantic, Indian and Pacific Oceans are joined to form part of a single global thermohaline circulation. During winter, the howling katabatics sometimes scour the ice off patches of the sea's surface leaving large ice-locked lagoons, or 'polynyas'. Recent research has shown that as fresh sea ice forms, it is continuously stripped away by the wind and may be blown up to 90km in a single day. Since only fresh water freezes into ice, the water that remains becomes increasingly salty and dense, sinking until it spills over the continental shelf. Cold water carries more oxygen than warm water, so when it rises, well into the northern hemisphere, it reoxygenates and revitalises the ocean. The state of the northern oceans, and their biological productivity, owe much to what happens in the Antarctic.

Questions 14-18

The reading Passage has seven paragraphs A-F.

Which paragraph contains the following information?

Write the correct letter A-F, in boxes 14-18 on your answer sheet.

14 The example of research on weather prediction on agriculture

15 Antarctic sea ice brings life back to the world oceans' vitality.

16 A food chain that influence the animals living pattern based on Antarctic fresh sea ice

17 The explanation of how atmosphere pressure above Antarctica can impose effect on global climate change

18 Antarctica was once thought to be a forgotten and insignificant continent

Questions 19-21

Summary

Please match the natural phenomenon with correct determined factor Choose the correct answer from the box; Write the correct letter A-F, in boxes 19-21 on your answer sheet.

19 Globally, mass Antarctica's size and.....influence the climate change

20 .....contributory to western wind

21 Southern Oscillation Index based on a ù pressure can predict.....in Australia

---

A. Antarctic Circumpolar Current (ACC)

B. katabatic winds

C. rainfall

D. temperature

E. glaciers

F. pressure

Questions 22-26

*Choose the correct letter. A, **B, c** or **D.***

Write your answers in boxes 22-26 on your answer sheet.

22. In the paragraph B, the author want to tell which of the following truth about Antarctic?

A. To show Antarctica has been a central topic of global warming in Mass media

B. To illustrate its huge see ice brings food to million lives to places in the world

C. To show it is the heart and its significance to the global climate and current

D. To illustrate it locates in the central spot on Earth geographically

23. Why do Australian farmers keep an eye on the Antarctic ocean temperature ?

A. Help farmers reduce then economic or ecological losses

B. Retrieve grassland decreased in the overgrazing process

C. Prevent animal from dying

D. A cell provides fertilizer for the grassland

24. **What is the final effect of katabatic winds?**

A. Increase the moving speed of ocean current

B. Increase salt level near ocean surface

C. Bring fresh ice into southern oceans

D. Pile up the mountainous ice cap respected by mariners

25. The break of the continental shelf is due to the

A. Salt and density increase

B. Salt and density decrease

C. global warming resulting a rising temperature

D. fresh ice melting into ocean water

26. **The decrease in number of Whales and seabirds is due to**

A. killers whales are more active around

B. Sea birds are affected by high sea level salty

C. less sea ice reduces productivity of food source

D. seals fail to reproduce babies

Section 3

Language strategy In Multinational Company

A. The importance of language management in multinational companies has never been greater than today. Multinationals are becoming ever more conscious of the importance of

global coordination as a source of competitive advantage and language remains the ultimate barrier to aspirations of international harmonization. Before attempting to consider language management strategies, companies will have to evaluate the magnitude of the language barrier confronting them and in doing so they will need to examine it in three dimensions: the Language Diversity, the Language Penetration and the Language Sophistication. Companies next need to turn their attention to how they should best manage language. There is a range of options from which MNCs can formulate their language strategy.

B. Lingua Franca: The simplest answer, though realistic only for English speaking companies, is to rely on ones native tongue. As recently as 1991 a survey of British exporting companies found that over a third used English exclusively in dealings with foreign customers. This attitude that "one language fits all" has also been carried through into the Internet age. A survey of the web sites of top American companies confirmed that over half made no provision for foreign language access, and another found that less than 10% of leading companies were able to respond adequately to emails other than in the company's language. Widespread though it is however, reliance on a single language is a strategy that is fatally flawed. It makes no allowance for the growing trend in Linguistic Nationalism whereby buyers in Asia, South America and the Middle East in particular are asserting their right to "work in the language of the customer". It also fails to recognize the increasing vitality of languages such as Spanish, Arabic and Chinese that overtime are likely to challenge the dominance of English as a lingua franca. In the IT arena it ignores the rapid globalization of the Internet where the number of English-language e-commerce transactions, emails and web sites, is rapidly diminishing as a percentage of the total. Finally, the total reliance on a single language puts the English speaker at risk in negotiations. Contracts, rules and legislation are invariably written in the local language, and a company unable to operate in that language is vulnerable.

C. **Functional Multilingualism**: Another improvised approach to Language is to rely on what has been termed "Functional Multilingualism". Essentially what this means is to muddle through, relying on a mix of languages, pidgins and gestures to communicate by whatever means the parties have at their disposal. In a social context such a shared effort to make one another understand might be considered an aid to the bonding process with the frustration of communication being regularly punctuated by moments of absurdity and humor. However, as the basis for business negotiations it appears very hit-and-nuts. And yet Hagen's recent study suggests that 16% of international business transaction; are conducted in a "cocktail of languages." Functional Multilingualism shares the same defects as reliance on a lingua franca and increases the probability of cognitive divergence between the parties engaged in the communication.

D. **External Language Resources**: A more rational and obvious response to the language barrier is to employ external resources such as translators and interpreters, and certainly there are many excellent companies specialized in these fields. However, such a response is by no means an end to the language barrier. For a start these services can be very expensive with a top Simultaneous Interpreter, commanding daily rates as high as a partner in an international consulting company. Secondly, any good translator or interpreter will insist that to be fully effective they must understand the context of the subject matter. This is not always possible. In some cases it is prohibited by the complexity or specialization of the topic. Sometimes by lack of preparation time but most often the obstacle is the reluctance of the parties to explain the wider context to an 'outsider". Another problem is that unless there has been considerable pre-explaining between the interpreter and his clients it is likely that there will be ambiguity and cultural overtones in the source messages the interpreter has to work with. They will of course endeavour to provide a hi-fidelity translation but in this circumstance the intelpreter has to use initiative and guess work. This clearly injects a potential source of misunderstanding into the proceedings. Finally while a good interpreter will attempt to convey not only the meaning but also the spirit of any communication, there can be no doubt that there is a loss of rhetorical power when communications go through a third party. So in situations requiring negotiation, persuasion, humor etc. the use of an interpreter is a poor substitute for direct communication.

E. **Training**: The immediate and understandable reaction to any skills-shortage in a business is to consider personnel development and certainly the language training industry is well developed. Offering programs at almost every level and in numerous languages. However, without doubting the value of language training no company should be deluded into believing this to be assured of success. Training in most companies is geared to the economic cycle. When times are good, money is invested in training. When belts get tightened training is one of the first "luxuries" to be pared down. In a study conducted across four European countries, nearly twice as many companies said they needed language training in coming years as had conducted training in past years. This disparity between "good intentions" and "actual delivery", underlines the problems of relying upon training for language skills. Unless the company is totally committed to sustaining the strategy even though bad times, it will fail.

F. One notable and committed leader in the field of language training has been the Volkswagen Group. They have developed a language strategy over many years and in many respects can be regarded as a model of how to manage language professionally. However, the Volkswagen approach underlines that language training has to be considered a strategic rather than a tactical solution. In their system to progress from "basics" to "communications competence" in a language requires the completion of 6 language stages each one demanding approximately 90 hours of refresher course, supported by many more hours of self-study, spread over a 6-9 month period. The completion of each stage is marked by a post-stage achievement test, which is a pre-requisite for continued training. So even this professionally managed program expects a minimum of three years of fairly intensive study to produce an accountant. Engineer, buyer or salesperson capable of working effectively in a foreign

language. Clearly companies intending to pursue this route need to do so with realistic expectations and with the intention of sustaining the program over many years. Except in terms of "brush-up" courses for people who were previously fluent in a foreign language, training cannot be considered a quick fix and

Questions 27-32

Summary

Complete the following summary of the Whole Paragraphs of Reading Passage, choosing A-L words from the following options. Write your answers in boxes 27-32 on your answer sheet.

MNCs often encounter language barrier in their daily strategy, then they seek several approaches to solve such problems. First, native language gives them a realistic base in a different language speaking country, but problem turned up when they deal with oversea_____27_____. For example, operation on translation of some key_____28_____, it is inevitable to generate differences by rules from different countries. Another way is to rely on a combination of spoken language and____29____, yet a report written that over one-tenth business _____30_____processed in a party language setting. Third way: hire translators. However, firstly it is _____31_____, besides if they are not well-prepared, they have to resort to his/her own _____32_____ work.

A. gestures

B. clients

C. transaction

D. understanding and assumption

E. accurate

F. documents

G. managers

H. body language

I. long-term

J. effective

K. rivals

L. costly

Questions 33-39

Answer the questions below.

Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the passage for each answer.

33 What understandable reaction does *Training* pay attention to according to the author?

34 In what term does the writer describe training during economy depression?

35 What contribution does Volkswagen Group set up for multinational companies?

36 What does Volkswagen Group consider language training as in their company?

37 How many stages are needed from basic course to advanced in training?

38 How long does a refresher course (single stage) need normally?

39 At least how long is needed for a specific professional to acquire a foreign language?

Questions 40

Choose the correct letter, A, B, ***c*** *or D.*

Write your answers in boxes 40 on your answer sheet.

40 What is the Main function of this passage?

A. to reveal all kinds of language problems that companies may encounter

B. to exhibits some well-known companies successfully dealing with language difficulties

C. to evaluate various approaches for language barrier in multinational companies

D. to testify that training is only feasible approach to solve language problem

Reading Test 11

Section 1

THE ORIGIN OF WRITING

Writing was first invented by the Sumerians in ancient Mesopotamia before 3,000 BC. It was also independently invented in Meso-America before 600 BC and probably independently invented in China before 1,300 BC. It may have been independently invented in Egypt around 3,000 BC although given the geographical proximity between Egypt and Mesopotamia the Egyptians may have learnt writing from the Sumerians.

There are three basic types of writing systems. The written signs used by the writing system could represent either a whole word, a syllable or an individual sound. Where the written sign represents a word the system is known as logographic as it uses logograms which are written signs that represent a word. The earliest writing systems such as the Sumerian cuneiform, Egyptian hieroglyphics and Mayan glyphs are predominantly logographics as are modem Chinese and Japanese writing systems. Where the written sign represents a syllable the writing system is known as syllabic. Syllabic writing systems were more common in the ancient world than they are today. The Linear A and B writing systems of Minoan Crete and Mycenaean Greece are syllabic. The most common writing systems today are alphabetical. These involve the written sign (a letter) representing a single sound (known as a phoneme). The earliest known alphabetical systems were developed by speakers of semetic languages around 1700 BC in the area of modem day Israel and Palestine. All written languages will predominately use one or other of the above systems. They may however partly use the other systems. No written language is purely alphabetic, syllabic or logographic but may use elements from any or all systems.

Such fully developed writing only emerged after development from simplier systems. Talley sticks with notches on them to represent a number of sheep or to record a debt have been used in the past. Knotted strings have been used as a form of record keeping particularly in the area around the Pacific rim. They reached their greatest development with the Inca quipus where they were used to record payment of tribute and to record commercial transactions. A specially trained group of quipu makers and readers managed the whole system. The use of pictures for the purpose of communication was used by native Americans and by the Ashanti and Ewe people in Africa. Pictures can show qualities and characteristics which can not be shown by tally sticks and knot records. They do not however amount to writing as they do not bear a conventional relationship to language.

An alternative idea was that a system by which tokens, which represented objects like sheep, were placed in containers and the containers were marked on the outside indicating the number and type of tokens within the container gave rise to writing in Mesopotamia. The marks on the outside of the container were a direct symbolic representation of the tokens inside the container and an indirect symbolic representation of the object the token represented. The marks on the outside of the containers were graphically identical to some of the earliest pictograms used in Sumerian cuneiform, the worlds first written language. However cuneiform has approximately 1,500 signs and the marks

on the ouside of the containers can only explain the origins of a few of those signs.

The first written language was the Sumerian cuneiform. Writing mainly consisted of records of numbers of sheep, goats and cattle and quantites of grain. Eventually clay tablets were used as a writing surface and were marked with a reed stylus to produce the writing. Thousands of such clay tablets have been found in the Sumerian city of Uruk. The earliest Sumerian writing consists of pictures of the objects mentioned such as sheep or cattle. Eventually the pictures became more abstract and were to consist of straight lines that looked like wedges.

The earliest cuneiform was an accounting system consisting of pictograms representing commodities such as sheep and a number. The clay tablets found might for example simply state “ten sheep”. Such writing obviously has its limitations and would not be regarded as a complete writing system. A complete writing system only developed with the process of phonctization. This occurs when the symbol ceases to represent an object and begins to represent a spoken sound, which in early cuneiform would be a word. This process was assisted when the symbols which initally looked very like the object they represented gradually became more abstract and less clearly related to an object. However while the symbol became more closely connected to words, it was words dealing with objects, such as sheep, bird or pot. It was still not possible to write more abstract ideas such as father, running, speech or foreigner.

The solution to this problem was known as the rebus principle. Words with the same or similar pronuciation to an abstract word could be used to represent the abstract word. The sign for eye could be used to represent the word “I”. The sign for deer could represent the word “dear”. Which word is referred to by the picture is decided by an additional sign. Pictographs which originally represented a word began to represent the sound of the word. The rebus principle is used to represent abstract words in all word writing systems in Sumer, Egypt, China and in the Aztec and Mayan writing in central America.

The Rebus principle lead to cuneiform becoming a form of logo-syllabic writing consisting of both logograms and syllabic writing. The effect of the change from logographic to logo-syllabic writing was substantial. Logographic writing cannot produce normal prose and is resticted to nouns, numbers, names and adjectives. The vast majority of early Sumerian writing consisted of bureaucratic records of products received or products distributed. Only when syllabic writing was introduced into cuneiform did it become possible to write prose such as myths and royal propaganda.

The next major development in writing in the old world was the development of the alphabet. The alphabet was developed out of Egyptian hieroglyphs which contained 24 signs for 24 Egyptian consonants. About 1700 BC Semites who knew Egyptian hieroglyphs began making certain changes in their writing system. They put the letters in a particular sequence and gave them simple names to assist learning and ease of memory. They also dropped the logograms and other signs used in hieroglyphs and just kept the Egyptian consonants and resticted the signs to those for individual consonants. Finally, they introduced vowels into their alphabet. Alphabets were soon to spread over most of the world as they provide both flexibility and simplicity for a writing system.

Question 1-3

Complete the summary below.
Choose NO MORE THAN THREE WORDS from the passage for each answer.
Write your answers in boxes 1 - 3 on your answer sheet.

There are three types of writing systems. Logography utilizes written signs representing a 1…….Syllabic writing systems were more common in the ancient world, as they adopt written sign symbolizing a 2……The most common alphabetical systems use a letter to represent a 3……

Question 4- 10

Do the following statements agree with the information given in Reading Passage 1?
On your answer sheet please write
TRUE if the statement is true
FALSE if the statement is false
NOT GIVEN if the information is not given in the passage

4. There is no language that adopts elements from only one writing system.
5. Inca quipus used talley sticks to track payments and commercial transactions.
6. The marks on the outside of the containers originated from pictograms used in Sumerian cuneiform.
7. The first written language was created to document the quantities and types of livestock and food.
8. Cuneiform could not express abstract concepts at all.
9. Affected by the rebus principle, cuneiform combined the elements of both logograms and syllabic writing.
10. Most countries adopt alphabetical writing systems due to their flexibility and simplicity.

Question 11 - 14

Use the information in the passage to match the options (listed A - E) with statements (listed 11-14) below.
Write the appropriate letter (A - E) in boxes 11 - 14 on your answer sheet.

NB Some options may match more than one statement.

A. Egyptians
B. Native Americans
C. Semites
D. Chinese
E. Sumerians

11……..developed the alphabet from Egyptian hieroglyphs.

12……..used pictures for the purpose of communication.

13……..invented a written language which consisted of signs looked like wedges.

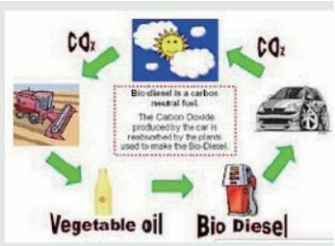
14……..might have independently invented writing 5,000 years ago.

Section 2

Aqua product: New Zealand's Igae Biodiesel

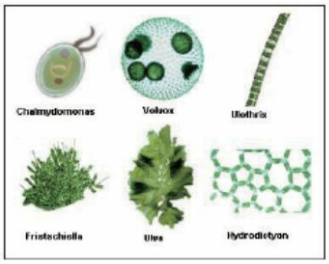
A. The world's first wild algae biodiesel produced in New Zealand by Aquaflow Bionomic Corporation, was successfully test driven in Wellington by the Minister for Energy and Climate Change Issues, David Parker. In front of a crowd of invited guests, media and members of the public, the Minister filled up a diesel-powered Land Rover with Aquaflow B5 blend bio-diesel and then drove the car around the forecourt of Parliament Buildings in Central Wellington. Green Party co-leader, Jeanette Fitzsimons was also on board. Marlborough-based Aquaflow announced in May 2006 that it had produced the world's first bio-diesel derived from wild microalgae sourced from local sewage ponds.

B. "We believe we are the first company in the world to test drive a car powered by wild algae-based biodiesel. This will come as a surprise to some international bio-diesel industry people who believe that this break-through is still years away" explains Aquaflow spokesperson Barrie Leay. "A bunch of inventive Kiwis, and an Aussie, have developed this fuel in just over a year", he comments. "This is a huge opportunity for New Zealand and a great credit to the team of people who saw the potential in this technology from day one."



C. Bio-diesel based on algae could Vegetable oil E10 Diesel eventually become a sustainable, low cost, cleaner burning fuel alternative for New Zealand, powering family cars, trucks, buses and boats. It can also be used for other purposes such as heating or distributed electricity generation. There is now a global demand for billions of litres of biodiesel per year. Algae are also readily available and produced in huge volumes in nutrient rich waste streams such as at the settling ponds of Effluent Management Systems (EMS). It is a renewable indigenous resource ideally suited to the production of fuel and other useful by-products. The breakthrough comes after technology start-up, Aquaflow, agreed to undertake a pilot with Marlborough District Council late last year to extract algae from the settling ponds of its EMS based in Blenheim. By removing the main contaminant to use as a fuel feedstock, Aquaflow is also helping clean up the council's water

discharge - a process known as bio-remediation. Dairy farmers, and many food processors too, can benefit in similar ways by applying the harvesting technology to their nutrient- rich waste streams.



D. Blended with conventional mineral diesel, bio-diesel can run vehicles without the need for vehicle modifications. Fuel derived from algae can also help meet the Government B5 (5% blended) target, with the prospect of this increasing over time as bio-fuel production increases. "Our next step is to increase capacity to produce one million litres of bio-diesel from the Marlborough sewerage ponds over the next year" says Leay. Aquaflow will launch a prospectus pre-Christmas as the company has already attracted considerable interest from potential investors. The test drive bio-diesel was used successfully in a static engine test at Massey University's Wellington campus on Monday, December 11.

E. Today Algae are used by humans in many ways; for example, as fertilizers, soil conditioners and livestock feed. Aquatic and microscopic species are cultured in clear tanks or ponds and are either harvested or used to treat effluents pumped through the ponds. Algaculture on a large scale is an important type of aquaculture in some places. Naturally growing seaweeds are an important source of food, especially in Asia. They provide many vitamins including: A, B, B2, B6, **niacin** and c, and are rich in iodine, potassium, iron, magnesium and **calcium**. In addition commercially cultivated microalgae, including both Algae and Cyan-bacteria, are marketed as nutritional supplements, such as **Spirulina Chlorella** and the Vitamin-C supplement, Dunaliella, high in beta-carotene. Algae are national foods of many nations: China consumes more than 70 species, including ***choy,*** a **cyano-bacterium** considered a vegetable; Japan, over 20 species. The natural pigments produced by algae can be used as an alternative to chemical dyes and coloring agents.

F. Algae are the simplest plant organisms that convert sunlight and carbon dioxide in the air around **US** into stored energy through the well understood process of photosynthesis. Algae are rich in lipids and other combustible elements and Aquaflow is developing technology that will allow these elements to be extracted in a cost effective way. The proposed process is the subject of a provisional patent. Although algae are good at taking most of the nutrients out of sewage, too much algae can taint the water and make it smell. So, councils have to find a way of cleaning up the excess algae in their sewerage outflows and then either dispose of it or find alternative uses for it. And that's where Aquaflow comes in.

G. Unlike some bio-fuels which require crops to be specially grown and thereby compete for land use with food production, and use other scarce resources of fuel, chemicals and fertiliser, the source for algae-based biodiesel already exists extensively and the process produces a sustainable net energy gain by capturing free solar energy from the sun.

You should spend about 20 minutes on Questions 15- 27 which are based on Reading Passage 2 below.

Questions 15-19

Reading Passage 2 contains 7 paragraphs A -G.

Which paragraphs stale the following information?

Write the appropriate letters A - G in boxes 15-19 on your answer sheet.

You may use any letter more than once

15 It is unnecessary to modify vehicles driven by bio-diesel.

16 Some algae are considered edible plants.

17 Algae could be part of a sustainable and recycled source.

18 Algae bio-diesel is superior to other bio-fuels in lot a ways.

19 overgrown algea also can be a potential threat to environment

Questions 20-24

*Complete the following summary of the paragraphs of Reading Passage, using **more than two** words from the Reading Passage for each answer. Write your answers in boxes **20-24** on your answer sheet.*

Bio-diesel based on algae could become a substitute for 20.....in New Zealand. It could be used to 21..... vehicles such as cars and boats. As a result, billions of litres of bio-diesel are required world wide each year. Algae can be obtained from 22..... with nutrient materials. With the technology breakthrough, algae are extracted and the 23…… removed from the settling ponds. Dairy farmers, and many food processors can adopt such 24..... technology.

Question 25 -27

Choose words from the passage to answer the questions25 -27. Write NO MORE THAN THREE WORDS for each answer.

25 What environmental standard would bio-diesel vehicles are to meet?

26 What is to do as the immediate plan for coming years for Aquaflow?

27 Through what kind of process do algae obtain and store energy?

Section 3

British Architecture 2

A. Architecture is about evolution, not revolution. It used to be thought that once the Romans pulled out of Britain in the fifth century, their elegant villas, carefully-planned towns and engineering marvels like Hadrian's Wall simply fell into decay as British culture was plunged into the Dark *Ages*. It took the Norman Conquest of 1066 to bring back the light, and the ố othic cathedral-builders of the Middle Ages played an important part in the revival of British culture. However, the truth is not as simple as that Romano-British culture - and that included architecture along with language, religion, political organization and the arts - survived long after the Roman withdrawal. And although the Anglo-Saxons had a sophisticated building style of their own, little survives to bear witness to their achievements as the vast majority of Anglo-Saxon buildings were made of wood.

B. Even so, the period between the Norman landing at Pevensey in 1066 and the day in 1485 when Richard III lost his horse and his head at Bosworth, ushering in the Tudors and the /Early Modern period, marks a rare flowering of British building. And it is all the more remarkable because the

underlying ethos of medieval architecture was 'fitness for purpose'. The great cathedrals and parish churches that lifted up their towers to heaven were not only acts of devotion in stone; they were also fiercely functional buildings. Castles served their particular purpose and their battlements and turrets were for use rather than ornament. In a sense, the buildings of the 16th century were also governed by fitness for purpose - only now, the purpose was very different. In domestic architecture, in particular, buildings were used to display status and wealth.

C. This stately and curious workmanship showed itself in various ways. A greater sense of security led to more outward-looking buildings, as opposed to the medieval arrangement where the need for defense created houses that faced inward onto a courtyard or series of courtyards. This allowed for much more in the way of exterior ornament. The rooms themselves tended to be bigger and lighter - as an expensive commodity, the use of great expanses of glass was in itself a statement of wealth. There was also a general move towards balanced and symmetrical exteriors with central entrances.

D. With the exception of Inigo Jones (1573-1652), whose confident handling of classical detail and proportion set him apart from all other architects of the period, most early 17th century buildings tended to take the innocent exuberance of late Tudor work one step further. /But during the 1640s and 50s the Civil War and its aftermath sent many gentlemen and nobles to the Continent either to escape the fighting or, when the war was lost, to follow Charles II into exile. There they came into contact with French, Dutch and Italian architecture and, with Charles's restoration in 1660, there was a flurry of building activity as royalists reclaimed their property and built themselves houses reflecting the latest European trends. The British Baroque was a reassertion of authority, an expression of absolutist ideology by men who remembered a world turned upside down during the Civil War. The style is heavy and rich, sometimes overblown and melodramatic. The politics which underpin it are questionable, but its products are breathtaking.

/E. The huge glass-and-iron Crystal Palace, designed by Joseph Paxton to house the Great Exhibition of 1851, shows another strand to 19th century architecture -one which embraced new industrial processes. But it wasn't long before even this confidence in progress came to be regarded with suspicion. Mass production resulted in buildings and furnishings that were too perfect, as the individual craftsman no longer had a major role in their creation. Railing against the dehumanising effects of industrialisation, reformers like John Ruskin and William Morris made a concerted effort to return to hand-crafted, pre-industrial manufacturing techniques. Morris's influence grew from the production of furniture and textiles, until by the 1880s a generation of principled young architects was following his call for good, honest construction.

F. The most important trends in early 20th century architecture simply passed Britain by. Whilst Gropius was working on cold, hard expanses of glass, and Le Corbusier was experimenting with the use of reinforced concrete frames, we had staid establishment architects like Edwin Lutyens producing Neo-Georgian and Renaissance country houses for an outmoded landed class. In addition there were slightly batty architect-craftsmen, the heirs of William Morris, still trying to turn the clock back to before the Industrial Revolution by making chairs and spurning new technology. Only a handful of Modern Movement buildings of any real merit were produced here during the 1920s and 1930s, and most of these were the work of foreign architects such as Serge Chermayeff, Berthold Lubetkin and Erno Goldf inger who had settled in this country.

G. After the Second World War the situation began to change. The Modern Movement's belief in progress and the future struck a chord with the mood of post-war Britain and, as reconstruction began

under Attlee's Labour government in 1945, there was a desperate need for cheap housing which could be produced quickly. The use of prefabricated elements, metal frames, concrete cladding and the absence of decoration - all of which had been embraced by Modernists abroad and viewed with suspicion by the British -were adopted to varying degrees for housing developments and schools. Local authorities, charged with the task of rebuilding city center, became important patrons of architecture. This represented a shift away from the private individuals who had dominated the architectural scene for centuries.

H. Since the War it has been corporate bodies like these local authorities, together with national and multinational companies, and large educational institutions, which have dominated British architecture. By the late 1980s the Modern Movement, unfairly blamed for the social experiments implicit in high-rise housing, had lost out to irony and spectacle in the shape of post-modernism, with its cheerful borrowings from anywhere and any period. But now, in the new Millennium, even post-modernism is showing signs of age. What comes next? Post-post-modernism?

Questions 28-34

Complete the sentences below.

Choose NO MORE THAN THREE WORDS from the passage for each answer.

Write your answers in boxes 28-34 on your answer sheet.

28 The Anglo-Saxon architecture failed to last because the buildings were constructed in.....

29 Different from the medieval architecture, the buildings of the 16th century represents.....

30 The costly glass was applied widely as an.....in that years

31 Inigo Jones was skilled at handling.....style.

32 William Morris favored the production of ..... made in pre-industrial manufacturing techniques.

33 The architects such as.....provided the landlord with conservative houses.

34 After World War Two, the architect commission shifted from individual to.....

Questions 35-40

*Choose the correct letter, A, B, **c** or D.*

Write the correct letter in boxes 28-32 on your answer sheet.

35 The feature of medieval architecture was

A. immense

B. useful

C. decorative

D. bizarre

36 What contributes to the outward-looking buildings in the 16th century?

A. safety

B. beauty

C. quality

D. technology

37 Why were the buildings in the 1660s influenced by the latest European trends?

A. Because the war was lost.

B. Because the craftsman came from all over the Europe,

C. Because the property belongs to the gentlemen and nobles.

D. Because the monarch came back from the continent.

38 What kind of sense did the British Baroque imply?

A. tough

B. steady

C. mild

D. conservative

39 The individual craftsman was no more the key to creation for the appearance of

A. Crystal Palace

B. preindustrial manufacturing return

C. industrial process in scale

D. ornament

40 The building style changed after World War Two as a result of

A. abundant materials

B. local authority

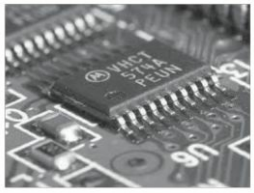
C. shortage of cheap housing

D. conservative views

Reading Test 12

Section 1

Radio Automation forerunner of the integrated circuit



Today they are everywhere. Production lines controlled by computers and operated by robots. There's no chatter of assembly workers, just the whirr and click of machines. In the mid-1940s, the workerless factory was still the stuff of science fiction. There were no computers to speak of and electronics was primitive. Yet hidden away in the English countryside was a highly automated production line called ECME, which could turn out 1500 radio receivers a day with almost no help from human hands.

A. John Sargrove, the visionary engineer who developed the technology, was way ahead of his time. For more than a decade, Sargrove had been trying to figure out how to make cheaper radios. Automating the manufacturing process would help. But radios didn't lend themselves to such methods: there were too many parts to fit together and too many wires to solder. Even a simple receiver might have 30 separate components and 80 hand-soldered connections. At every stage, things had to be tested and inspected. Making radios required highly skilled labour—and lots of it.

B. In 1944, Sargrove came up with the answer. His solution was to dispense with most of the fiddly bits by inventing a primitive chip—a slab of Bakelite with all the receiver's electrical components and connections embedded in it. This was something that could be made by machines, and he designed those too. At the end of the war, Sargrove built an automatic production line, which he called ECME (electronic circuit-making equipment), in a small factory in Effingham, Surrey.

ECME line

C. An operator sat at one end of each ECME line, feeding in die plates. She didn't need much skill, only quick hands. From now on, everything was controlled by electronic switches and relays. First stop was the sandblaster, which roughened the surface of the plastic BO that molten metal would stick to it The plates were then cleaned to remove any traces of grit The machine automatically checked that the surface was rough enough before sending the plate to the spraying section. There, eight nozzles rotated into position and sprayed molten zinc over both sides of the plate. Again, the nozzles only began to spray when a plate was in place. The plate whizzed on. The next stop was the milling machine, which ground away the surface layer of metal to leave the circuit and other components in the grooves and recesses. Now the plate was a composite of metal and plastic. It sped on to be lacquered and have its circuits tested. By the time it emerged from the end of the line, robot hands had fitted it with sockets to attach components such as valves and

loudspeakers. When ECME was working flat out; the whole process took 20 seconds.

D. ECME was astonishingly advanced. Electronic eyes, photocells that generated a small current when a panel arrived, triggered each step in the operation, BO avoiding excessive wear and tear on the machinery. The plates were automatically tested at each stage as they moved along the conveyor. And if more than two plates in succession were duds, the machines were automatically adjusted—or if necessary halted In a conventional factory, I workers would test faulty circuits and repair them. But Sargrove's assembly line produced circuits so cheaply they just threw away the faulty ones. Sargrove's circuit board was even more astonishing for the time. It predated the more familiar printed circuit, with wiring printed on aboard, yet was more sophisticated. Its built-in components made it more like a modem chip.

E. When Sargrove unveiled his invention at a meeting of the British Institution of Radio Engineers in February 1947, the assembled engineers were impressed. So was the man from The Times. ECME, he reported the following day, "produces almost without human labour, a complete radio receiving set. This new method of production can be equally well applied to television and other forms of electronic apparatus.

F. The receivers had many advantages over their predecessors, wit components they were more robust. Robots didn't make the sorts of mistakes human assembly workers sometimes did. "Wiring mistakes just cannot happen," wrote Sargrove. No w ù r es also meant the radios were lighter and cheaper to ship abroad. And with no soldered wires to come unstuck, the radios were more reliable. Sargrove pointed out that the drcuit boards didn't have to be flat. They could be curved, opening up the prospect of building the electronics into the cabinet of Bakelite radios.

G. Sargrove was all for introducing this type of automation to other products. It could be used to make more complex electronic equipment than radios, he argued. And even if only part of a manufacturing process were automated, the savings would be substantial. But while his invention was brilliant, his timing was bad. ECME was too advanced for its own good. It was only competitive on huge production runs because each new job meant retooling the machines. But disruption was frequent. Sophisticated as it was, ECME still depended on old-fashioned electromechanical relays and valves —which failed with monotonous regularity. The state of Britain's economy added to Sargrove's troubles. Production was dogged by power cuts and post-war shortages of materials. Sargrove's financial backers began to get cold feet.

H. There was another problem Sargrove hadn't foreseen. One of ECME's biggest advantages—the savings on the cost of labour—also accelerated its downfall. Sargrove's factory had two ECME production lines to produce the two c ũ cuits needed for each radio. Between them these did what a thousand assembly workers would otherwise have done. Human hands were needed only to feed the raw material in at one end and plug the valves into then sockets and fit the loudspeakers at the other. After that, the only job left was to fit the pair of Bakelite panels into a radio cabinet and check that it worked.

I. Sargrove saw automation as the way to solve post-war labour shortages. With somewhat Utopian idealism, he imagined his new technology would free people from boring, repetitive jobs on the production line and allow them to do more interesting work. "Don't get the idea that we are out to rob people of then jobs," he told the Daily Mnror. "Our task is to liberate men and women from being slaves of machines."

J. The workers saw things differently. They viewed automation in the same light as the everlasting

light bulb or the suit that never wears out—as a threat to people's livelihoods. If automation spread, they wouldn't be released to do more exciting jobs. They'd be released to join the dole queue. Financial backing for ECME fizzled out. The money dried up. And Britain lost its lead in a technology that would transform industry just a few years later.

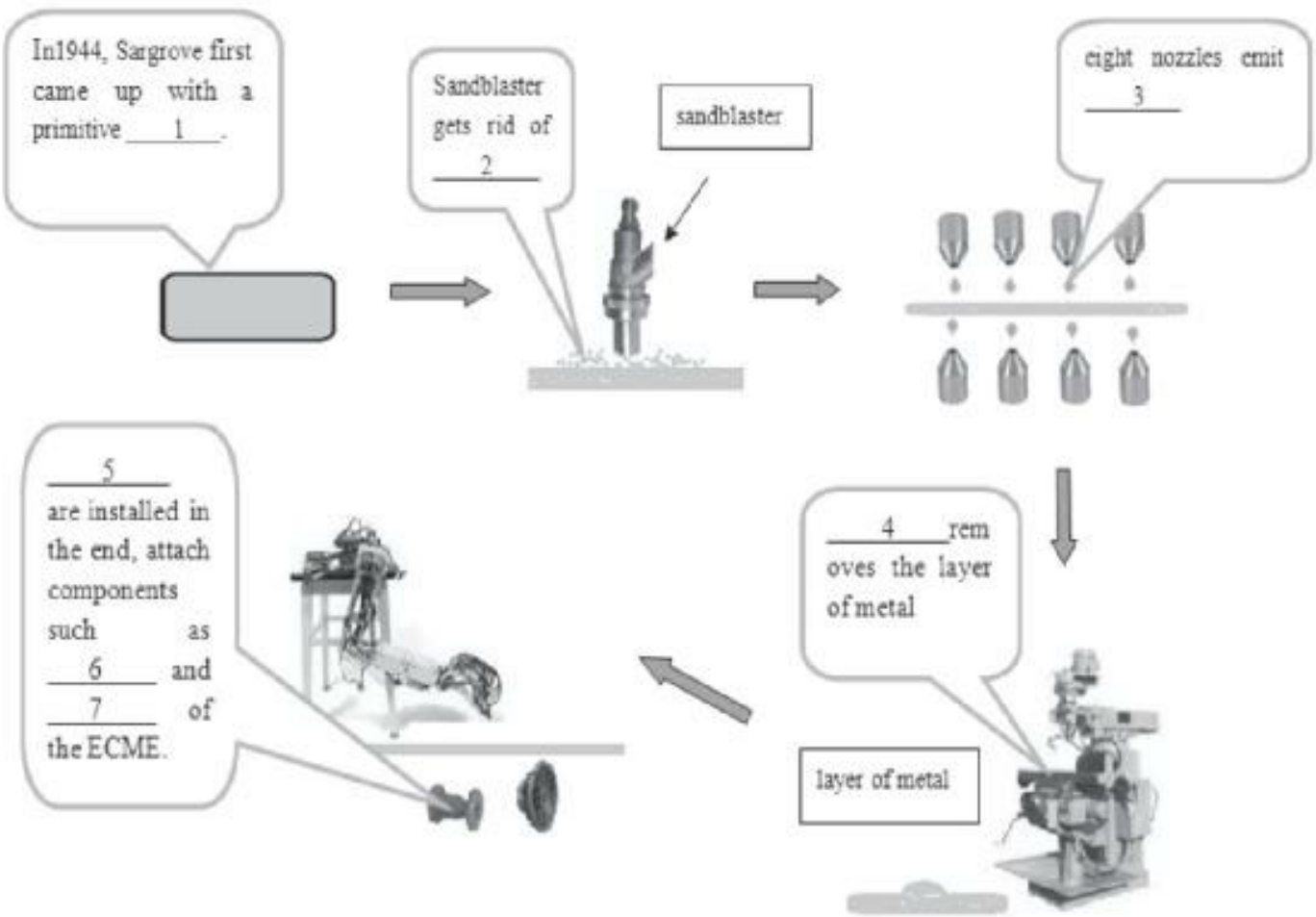
Questions 1-7

Summary

The following diagram explains the process of ECME:

Complete the following chart of the paragraphs of Reading Passage, using *no more than two* words from the Reading Passage for each answer. Write your answers in boxes 1-7 on your answer sheet

Diagram for ECME line on Bakelite


In1944, Sargrove first came up with a primitive ___1___.
Sandblaster gets rid of ___2___
sandblaster
eight nozzles emit ___3___
___4___ removes the layer of metal
layer of metal
___5___ are installed in the end, attach components such as ___6___ and ___7___ of the ECME.

Questions 8-11

Complete the following summary of the paragraphs of Reading Passage. using TO more than two words from the Reading Passage for each answer. Writs your answers inboxes 8-11 on your answer sheet

Summary

Sargrove had been dedicated to create a.....8.....radio by automation of manufacture. The old version of radio had a large number of independent.....9..... After this innovation made, wireless-style radios became.....10.....and inexpensive to export oversea. As the Saigrove saw it, the real benefit

of ECME's radio was that it reduced.....11.....of manual work; which can be easily copied to other industries of manufacturing electronic devices.

Questions 12-13

Choose the correct letter A, B, c or D.

Write your answers inboxes 12-13 on your answer sheet

12 What were **workers attitude** towards *ECME Model initialy*

A anxious

B welcoming

C boring

D inspiring

13 What is the **main idea** of this passage?

A approach to reduce the price of radio

B a new generation of fully popular products and successful business

C in application of die automation in the early stage

D ECME technology can be applied in many product fields

Section 2

Bestcom CONSIPERATE COMPUTING

Eric Horvitz A. "YOUR BATTERY IS NOW FULLY CHARGED," ANNOUNCED THE LAPTOP COMPUTER to its owner, Donald A. Norman, with enthusiasm—perhaps even a hint of pride? in its synthetic voice. To be sure, distractions and multitasking are hardly new to the human condition. "A complicated life, continually interrupted by competing requests for attention, is as old as procreation," laughs Ted Selker of the Massachusetts Institute of Technology Media Lab. But increasingly, it is not just our kids pulling us three ways at once; it is also a relentless barrage of e-mail, alerts, alarms, calls, instant messages and automated notifications, none of them coordinated and all of them oblivious to whether we are busy—or even present. "It's ridiculous that my own computer can't figure out whether I'm in front of it, but a public toilet can," exclaims Roel Vertegaal of Queen's University in Ontario.

B. Humanity has connected itself through roughly three billion networked telephones, computers, traffic lights— even refrigerators and picture frames— because these things make life more convenient and keep US available to those we care about. So although we could simply turn off the phones, close the e-mail program, and shut the office door when it is time for a meeting or a stretch of

concentrated work, we usually don't. We just endure the consequences.

C. Numerous studies have shown that when people are unexpectedly interrupted, they not only work less efficiently but also make more mistakes. "It seems to add cumulatively to a feeling of frustration," Picard reports, and that stress response makes it hard to regain focus. It isn't merely a matter of productivity and the pace of life. For pilots, drivers, soldiers and doctors, errors of inattention can be downright dangerous. "If we could just give our computers and phones some understanding of the limits of human attention and memory, it would make them seem a lot more thoughtful and courteous," says Eric Horvitz of Microsoft Research. Horvitz, Vertegaal, Selker and Picard are among a small but growing number of researches trying to teach computers, phones, care and other gadgets to behave less like egocentric oafs and more likeconsiderate colleagues.

D. "Attentive" computing systems have begun appearing in newer Volvos and IBM has introduced Websphere communications software with a basic busyness sense. Microsoft has beat running extensive in-house tests of a much more sophisticated system since 2003. Within a few years, companies may be able to offer every office worker a software version of the personal receptionist that only comer-suite executives enjoy today. But if such an offer should land in your inbox, be sure to read the print before you sign. An attentive system, by definition, is one that Ì B always watching. That considerate computer may come to know more about your work habits than you do.

E. Most people aren't as busy as they think they are, which is why we can usually tolerate ~~in~~terruptions from our inconsiderate electronic paraphernalia. James Fogarty and Scott E. Hudson of Carnegie Mellon University recently teamed up with Jennifer Lai of IBM Research to study 10 managers, researchers and interns at work. They videotaped the subjects and periodically had them rate then "interruptibility." The amount of time the workers spent in leave-me-alone mode varied from person to person and day to day, ranging from 10 to 51 percent. On average, the subjects wanted to work without interruption about one third of the time. In studies of Microsoft employees, Horvitz has similarly found that they typically spend more than 65 percent of theft day in a state of low attention.

F. Today's phones and computers, winch naively assume that die user is never too busy to take a call, read an email, or click "OK" on an alert box, thus are probably correct about two thirds of time. To be useful, then, considerate systems will have to be more than 65 percent accurate in sensing when their users are near theft cognitive limits.

G. Bestcom/Enhanced Telephony, a Microsoft prototype based on Horvitz's weak, digs a little deeper into each user's computer to find clues about what they are up to. Microsoft launched an internal beta test of the system in mid-2003. By last October, Horvitz says, about 3,800 people were using the system to field their incoming phone calls.

H. Horvitz himself is one of those testers, and while we talk in his office in Redmond, Wash, Bestcom silently handles one call after another. First it checks whether the caller is listed in his address book, the company directory, or its log of people he has called recently. Triangulating these sources, it tries to deduce their relationship. Family members, supervisors and people he called earlier today ring through Others see a message on their computer that he is in a

meeting and won't be available until 3 RM. The system scans Horvitz's and the caller's calendar and offers to reschedule the call at a time that is open for both Some callers choose that option; others leave voice mail. E-mail messages get a similar screening. When Horvitz is out of the office, Bestcom automatically offers to forward selected callers to his cellphone—unless his calendar and other evidence suggest that he is in a meeting.

I. Most large companies already use computerized phone systems and standard calendar and contact management software, so tapping into those "sensors" should be straightforward. Not all employees will like the idea of having a microphone on all the time in them office, however, nor will everyone want to expose them datebook to some program they do not ultimately control. Moreover, some managers might be tempted to equate a "state of low attention" with "goofing off" and punish those who seem insufficiently busy.

Questions 14-19

Do the following statements agree with the information given in Reading Passage 2? ***In boxes 14-19 on your answer sheet, write***

TRUE	*if the statement is true*
FALSE	*if the statement ừ false*
NOT GIVEN	*if the information is not given in the passage*

14 According to Ted Selker, human productivity has been disturbed by office competitors frequently.

15 If people are interrupted by calls or E-mails, they usually put up with it instead of taking uncooperative action

16 Microsoft is now investigating a software which is compatible with ordinary office units

17 People usually have misperception about whether they are busy or not.

18 Researches conducted showed concentration-time span in office takes up only average a bit over than 65%.

19 Advanced phone and computer system will install a shortcut key for people receive information immediately.

Question 20-26

Answer the questions in the diagram below.

Choose ONLY ONE WORDS AND/OR ***A*** *NUMBER from like passage for each answer.*

Bestcom Working Process:

Bestcom system made further efforts in order to find **20** _____ about what are users doing.

in the office

out of office

check the **21** _____ between caller and user, whether caller have contact information of users, such as user's family or friend.

if callers are not in directory, a **22**_____ will show up on their screen, saying that user is not available at moment. Caller can **23** _____ a suitable time for both, or they can choose to leave a **24** _____to user.

Bestcom provides solution to transfer your call to user's **25** _____ if there is no **26** _____ in his schedule.

Section 3

Environmentally-friendly! Vihicles

In the early 1990s, the California Air Resources Board (CARB), the government of California's "clean air agency", began a push for more fuel-efficient, lower-emissions vehicles, with the ultimate goal being a move to zero-emissions vehicles such as electric vehicles. In response, automakers developed electric models, including the Chrysler TEVan, Ford Ranger EV pickup truck, GM EV1 and S10 EV pickup, Honda EV Plus hatchback, Nissan lithium-battery Altra EV miniwagon and Toyota RAV4 EV. Ford Fusion is manufactured at Ford's Hermosillo Stamping & Assembly plant, located in Sonora Mexico. I thought going green was supposed to provide the u.s. with more jobs.

B. The automakers were accused of pandering to the wishes of CARB in order to continue to be allowed to sell cars in the lucrative Californian market, while failing to adequately

promote their electric vehicles in order to create the impression that the consumers were not interested in the cars, all the while joining oil industry lobbyists in vigorously protesting CARB's mandate. GM's program came under particular scrutiny; in an unusual move, consumers were not allowed to purchase EVls, but were instead asked to sign closed-end leases, meaning that the cars had to be returned to GM at the end of the lease period, with no option to purchase, despite lesser interest in continuing to own the cars. Chrysler, Toyota, and a group of GM dealers sued CARB in Federal court, leading to the eventual neutering of CARB's ZEV Mandate.

C. After public protests by EV drivers' groups upset by the repossession of then cars, Toyota offered the last 328 RAV4-EVS for sale to the general public during six months, up until November 22, 2002. Almost all other production electric cars were withdrawn from the market and were in some cases seen to have been destroyed by the manufacturers. Toyota continues to support the several hundred Toyota RAV4-EV in the hands of the general public and in fleet usage. GM famously de-activated the few EVls that were donated to engineering schools and museums.

D. Throughout the 1990s, appeal of fuel-efficient or environmentally friendly cars declined among Americans, who instead favored sport utility vehicles, which were affordable to operate despite their poor fuel efficiency thanks to lower gasoline prices. American automakers chose to focus their product lines around the truck-based vehicles, which enjoyed larger profit margins than the smaller cars which were preferred in places like Europe or Japan. In 1999, the Honda Insight hybrid car became the first hybrid to be sold in North America since the little-known Woods hybrid of 1917.

E. In 1995, Toyota debuted a hybrid concept car at the Tokyo Motor Show, with testing following a year later. The first Prius, model NHW10, went on sale on December 10,1997. It was available only in Japan, though it has been imported privately to at least the United Kingdom, Australia, and New Zealand. The first generation Prius, at its launch, became the world's first mass-produced gasoline-electric hybrid car. The NHW10 Prius styling originated from California designers, who were selected over competing designs from other Toyota design studios.

F. In the United States, the NHW11 was the first Prius to be sold. The Prius was marketed between the smaller Corolla and the larger Camry. The published retail price of the car was US$19,995. The NHWU Prius became more powerful partly to satisfy the higher speeds and longer distances that Americans drive. Air conditioning and electric power steering were standard equipment. The vehicle was the second mass-produced hybrid on the American market, after the two-seat Honda Insight While the larger Prius could seat five, its battery pack restricted cargo space.

G. Hybrids, which featured a combined gasoline and electric powertrain, were seen as a balance, offering an environmentally friendly image and improved fuel economy, without being hindered by the low range of electric vehicles, albeit at an increased price over comparable gasoline cars. Sales were poor, the lack of interest attributed to the car's small size and the lack of necessity for a fuel-efficient car at the time. The 2000s energy crisis brought renewed interest in hybrid and electric cars. In America, sales of the Toyota Prius jumped, and a variety of automakers followed suit, releasing hybrid models of the ũ own. Several began to produce new electric car prototypes, as consumers called for cars that would free them from the fluctuations of oil prices.

H. In 2000, Hybrid Technologies, later renamed Li-ion Motors, started manufacturing electric cars in Mooresville, North Carolina. There has been increasing controversy with Li-ion Motors though due to the ongoing 'Lemon issues' regarding their product. And their attempt to cover it up. California electric car maker Tesla Motors began development in 2004 on the Tesla Roadster, which was first delivered to customers in 2008. The Roadster remained the only highway-capable EV in serial production and available for sale until 2010. Senior leaders at several large automakers, including Nissan and General Motors, have stated that the Roadster was a catalyst which demonstrated that there is pent-up consumer demand for more efficient vehicles. GM Vice Chairman Bob Lutz said in 2007 that the Tesla Roadster inspired him to push GM to develop the Chevrolet Volt, a plug-in hybrid sedan prototype that aims to reverse years of dwindling market share and massive financial losses for America's largest automaker. In an August 2009 edition of The New Yorker, Lutz was quoted as saying, "All the geniuses here at General Motors kept saying lithium-ion technology is 10 years away, and Toyota agreed with US -- and boom, along comes Tesla. So I said, 'How come some tiny little California startup, run by guys who know nothing about the car business, can do this, and we can't?' That was the crowbar that helped break up the logjam."

Question 27-30

*Choose the correct letter, **A**, B, **c** or D.*

27 What does the author think of the factory in Sonora in Mexico where the ford fusion is manufactured?

A the factory should be helpful in the US soil business!

B Employment of US will be created as consumers change their awareness;

C More competitive cars will be introduced into the market!

D this issue is hard to give a predict

28 In 1990s, what dropped in America for the environmentally friendly vehicles?

A production

B Attractiveness

C Announcement

D Expectation

29 What did GM notably send to engineering schools and museums?

A EV 1

B CARB

C RAV4

D MINI E

30 Nissan and GM high level leaders declared the real reason for the popularity of Roadster is its

A legendary concept

B huge population in market

C bursting demand

D artistic design

Questions 31-35

Do the following statements agree with the information given in Reading Passage In boxes 31-35 on your answer sheet, write

YES	*if the Statement is true*
NO	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

31 Some automakers mislead and suppressed the real demand for electric cars of keeping profit in certain market by luring the want of CARB.

32 Toyota started to sell 328 RAV4-EVS for taking up the market share.

33 In some countries, American auto-makers would like grab opportunity to earn money in vehicle of bigger litre engine cars rather than smaller ones

34 Hybrids cars are superior vehicles that combine impression of a environmentally friendly electric power engine and a lower price in unit sale.

35 an inspiration to make effort to produce hybrid cars is to coping with economic difficulties result from an declining market for General Motors.

Questions 36-40

Complete the summary using the of words, A-L below.

Write the correct letter, A-L in boxes 36-40 on your answer sheet.

A .....36..... was firstly introduced by Car maker Toyota in 1995. Then it started for sale in 1997 with a new first generation model. Not only in Japan, but included other countries such as .....37.....and Oceania in which ***the Prius*** was imported to. The first generation Prius was the first car in mass production which is powered by.....38.....The model NHW10 was designed by a winning Californian designer The innovated NHW 11 Prius has considerably higher running velocity and.....39.....than American counterparts. Still, the load

capacity of current Prius version was limited in its .....40.....

A electric car
B United Kingdom
C Market
D concept car
E longer distances
F Emissions
G battery
H Consumers
I gasoline-electricity
J inspiration
K cargo space
L orientation

Reading Test 13

Section 1

Bondi Beach

A. Bondi Beach, Australia's most famous beach, is located in the suburb of Bondi, in the Local Government Area of Waverley, seven kilometers from the centre of Sydney. "Bondi" or "Boondi" is an Aboriginal word meaning water breaking over rocks or the sound of breaking waves. The Australian Museum records that Bondi means place where a flight of nullas took place. There are Aboriginal Rock carvings on the northern end of the beach at Ben Buckler and south of Bondi Beach near McKenzies Beach on die coastal walk.

B. The indigenous people of the area at the time of European settlement have generally been welcomed to as the Sydney people or the Eora (Eora means "the people"). One theory describes the Eora as a sub-group of the Darug language group which occupied the Cumberland Plain west to the Blue Mountains. However, another theory suggests that they were a distinct language group of then own. There is no clear evidence for the name or names of the particular band(s) of the Eora that roamed what is now the Waverley area, A number of place names within Waverley, most famously Bondi, have been based on words derived from Aboriginal languages of the Sydney region.

C. From the mid-1800s Bondi Beach was a favourite location for family outings and picnics. The beginnings of the suburb go back to 1809, when the early road builder, William Roberts, received from Governor Bligh a grant of 81 hectares of what is now most of the business and residential area of Bondi Beach. In 1851, Edward Smith Hall and Francis O'Brien purchased 200 acres of the Bondi area that embraced almost the whole frontage of Bondi Beach, and it was named the "The Bondi Estate." Between 1855 and 1877 O'Brien purchased Hall's share of the land, renamed the land the "O'Brien Estate," and made the beach and the surrounding land available to the public as a picnic ground and amusement resort. As the beach became increasingly popular, O'Brien threatened to stop public beach access. However, die Municipal Council believed that the Government needed to intervene to make the beach a public reserve.

D. During the 1900s beach became associated with health, leisure and democracy - a playground everyone could enjoy equally. Bondi Beach was a working class suburb throughout most of the twentieth century with migrant people from New Zealand comprising the majority of the local population. The first tramway reached the beach in 1884. Following this, tram became the first public transportation in Bondi- As an alternative, this action changed die rule that only rich people can enjoy the beach- By the 1930s Bondi was drawing not only local visitors but also people from elsewhere in Australia and overseas. Advertising at the

time referred to Bondi Beach *as* the "Playground of the Pacific".

E. There is a growing trend that people prefer having relax near seaside instead of living unhealthily in cities. The increasing popularity of sea bathing during the late 1800s and early 1900s raised concerns about public safety and how to prevent people from drowning. In response, the world's first formally documented surf lifesaving club, the Bondi Surf Bathers' life Saving Club, was formed in 1907. This was powerfully reinforced by the dramatic events of "Black Sunday" at Bondi in 1938. Some 35,000 people were on the beach and a large group of life savers were about to start a surf race when three freak waves hit the beach, sweeping hundreds of people out to sea. Lifesavers rescued 300 people. The largest mass rescue in the history of surf bathing, it confirmed the place of the life saver i n the national imagination.

F. Bondi Beach Is the end point of the City to Surf Fun Run which is held each year in August Australian surf carnivals further instilled this image. A Royal Surf Carnival was held at Bondi Beach for the Queen Elizabeth n during her first visited in Australia, in 1954. Since 1867, there have been over fifty visits by a member of the British Royal Family to Australia. In addition to many activities, the Bondi Beach Markets is open every Sunday. Many wealthy people spend Christmas Day at the beach. However, the shortage of houses occurs when lots of people crushed to seaside. Manly is the seashore town which solved this problem. However, people still choose Bondi as the satisfied destination rather than Manly.

G. Bondi Beach has a commercial area along Campbell Parade and adjacent side streets, featuring many popular cafes, restaurants, and hotels, with views of the contemporary beach. It is depicted as wholly modem and European. In the last decade, Bondi Beaches' unique position has Been a dramatic rise in svelte houses and apartments to take advantage of the views and scent of the sea. The valley naming down to the beach is famous world over for its view of distinctive red tiled roofs. Those architectures are deeply influenced by British costal town.

H. Bondi Beach hosted the beach volleyball competition at the 2000 Summer Olympics. A temporary 10,000-seat stadium, a much smaller stadium, 2 warm-up courts, and 3 training courts were set up to host the tournament. The Bondi Beach Volleyball Stadium was constructed for it and stood for just six weeks. Campaigners oppose both the social and environmental consequences of the development. The stadium will divide the beach in two and seriously restrict public access for swimming, walking, and other forms of outdoor recreation. People protest for their human rights of having a pure seaside and argue for health life in Bondi.

I. "They're prepared to risk lives and risk the Bondi beach environment for the sake of eight days of volleyball", said Stephen Uniacke, a construction lawyer involved in the campaign. Other environmental concerns include the possibility that soil dredged up from below the sand will acidify when brought to the surface.

Questions 1-5

Do the following statements agree with the information given in Reading Passage 1? In boxes 1-5 on your answer sheet, write

TRUE	*if the Statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1 The name of the Bondi beach is first called by the British settlers.

2 The aboriginal culture in Australia is different when compared with European culture.

3 Bondi beach area holds many contemporary hotels

4 The seaside town in Bondi is affected by British culture for its characteristic red color.

5 Living near Bondi seashore is not beneficial for health.

Questions 6-9

Answer the questions below using ***NO MORE THAN TWO WORDS AND/OR NUMBERS*** *from the passage for each answer. Write your answers in boxes 6-9 on your answer sheet*

6 At the end of 19th century, which public transport did people use to go to bondi?

7 When did the British Royalty first visit Bondi?

8 Which Olympic event did Bondi hold in 2000 Sydney Olympic games?

9 What would be damaged if the stadium was built for that Olympic event?

Questions 10-13

Complete the following summary of the paragraphs of Reading Passage, using no more than two words *from the Reading Passage for each answer. Write your answers in boxes 10-13 on your answer sheet.*

Bondi beach holds the feature sport activities every year, which attracts lot of.....10.....choosing to live at this place during holidays. But local accommodation cannot meet with the expanding population, a nearby town of.....11.....is the first suburb site to support the solution, yet people prefer .....12.....as their best choice. Its seaside buildings are well-known in the world for the special scenic colored…..13……. on buildings and the joyful smell from the sea

Section 2

Hunting Perfume in Madagascar!

A. Ever since the ***unguentari*** plied their trade in ancient Rome, perfumers have to keep abreast of changing fashions. These days they have several thousand ingredients to choose from

when creating new scents, but there is always demand for new combinations. The bigger the "palette[7] of smells, the better the perfumer's chance of creating something fresh and appealing. Even with everyday products such as shampoo and soap, kitchen cleaners and washing powders, consumers are becoming increasingly fussy. And many of today's fragrances have to survive tougher treatment than ever before, resisting the destructive power of bleach or a high temperature wash cycle. Chemists can create new smells from synthetic molecules, and a growing number of the odours on the perfumer's palette are artificial. But nature has been in the business far longer.

B. The island of **Madagascar** is an evolutionary hot spot; 85% of its plants are unique, making it an ideal source for novel fragrances. Last October, Quest International, a company that develops fragrances for everything from the most delicate perfumes to cleaning products, sent an expedition to Madagascar in pursuit of some of nature's most novel fragrances. With some simple technology, borrowed from the pollution monitoring industry, and a fair amount of ingenuity, the perfume hunters bagged 20 promising new aromas in the Madagascan rainforest. Each day the team set out from their "hotel"—a wooden hut lit by kerosene lamps, and trailed up and down paths and animal tracks, exploring the thick vegetation up to 10 meters on either side of the trail. Some smells came from obvious places, often big showy flowers within easy reach- Others were harder to pin down. "Often it was the very small flowers that were much more interesting, says Clery. After the luxuriance of the rainforest, the little-known island of Nosy Hara was a stark, dry place geologically and biologically very different from the mainland, "Apart from two beaches, the rest of the Island Is impenetrable, except by hacking through the bush, says Clery. One of the biggest prizes here was a sweet-smelling sap weeping from the gnarled branches of some ancient shrubby trees in the parched Interior. So far no one has been able to identify the plant.

C. With most flowers or fruits, the hunters used a technique originally designed to trap and identify air pollutants. The technique itself is relatively simple. A glass bell jar or flask Ỉ S fitted over the flower. The fragrance molecules are trapped in this “headspace” and can be extracted by pumping the air out over a series of filters which absorb different types of volatile molecules. Back home in the laboratory, the molecules are flushed out of the filters and injected into a gas chromatograph for analysis. If it Is Impossible to attach the headspace gear, hunters fix an absorbent probe close to the source of the smell. The probe looks something like a hypodermic syringe, except that the 'needle' is made of silicone rubber which soaks up molecules from the air. After a few hours, the hunters retract the rubber needle and seal the tube, keeping the odour molecules inside until they can.be injected into the gas chromatograph in the laboratory.

D. Some of the most promising fragrances were those given, off by resins that oozed from the bark of trees. Resins are the source of many traditional perfumes, including frankincense and myrrh. The most exciting resin came from a Calophyllum tree, which produces a strongly scented medicinal oil. The sap of this Calophyllum smelt rich and aromatic, a little like church incense. But It also smelt of something the fragrance industry has learnt to live without castoreum a substance extracted from the musk glands of beavers and once a key ingredient in many perfumes. The company does not use animal products any longer, but Ã was wonderful to find a tree with an animal smell.

E. The group also set out from the island to capture the smell of coral reefs. Odors that conjure up sun kissed seas are highly sought after by the perfume industry. "From the ocean, the only thing we have is seaweed, and that has a dark and heavy aroma. We hope to find something unique among the corals," says Dir. The challenge for the hunters was to extract a smell from water rather than air. This was an opportunity to try Clery's new "aquaspace" apparatus a set of filters that work underwater. On Nosy Hara, jars were fixed over knobs of coral about 2 meters down and water pumped out over the absorbent filters. So what does coral smell like? "It's a bit like lobster and crab," says Clery. The team's task now is to recreate the best of then captured smells. First they must identify the molecules that make up each fragrance. Some ingredients may be quite common chemicals. But some may be completely novel, or they may be too complex or expensive to make in the lab. The challenge then is to conjure up the fragrances with more readily available materials. "We can avoid the need to import plants from the rainforest by creating the smell with a different set of chemicals from those in the original material," says Clery. "If we get it right, you can sniff the sample and it will transport you straight back to the moment you smelt it in the rainforest."

Questions 14-19

The reading passage has seven paragraphs A-E

Which paragraphs contains the following details Write the correct number, A-E, in boxes 14-18 on your answer sheet.

NB You may use any letter more than once.

14 One currently preferred spot to pick up plants for novel finding

15 A new task seems to be promising yet producing limited finding in fragrance source

16 The demanding conditions for fragrance to endure.

17 A substitute for substance no longer available to the perfume manufacture

18 Description of an outdoor expedition on land chasing new fragrances.

Questions 19-23

Do the following statements agree with the information given in Reading Passage 2? In boxes 19-23 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

19 Manufacturers can choose to use synthetic odours for the perfume nowadays.

20 Madagascar is chosen to be a place for hunting plants which are rare in other parts of the world.

21 Capturing the smell is one of the most important things for creating new aromas.

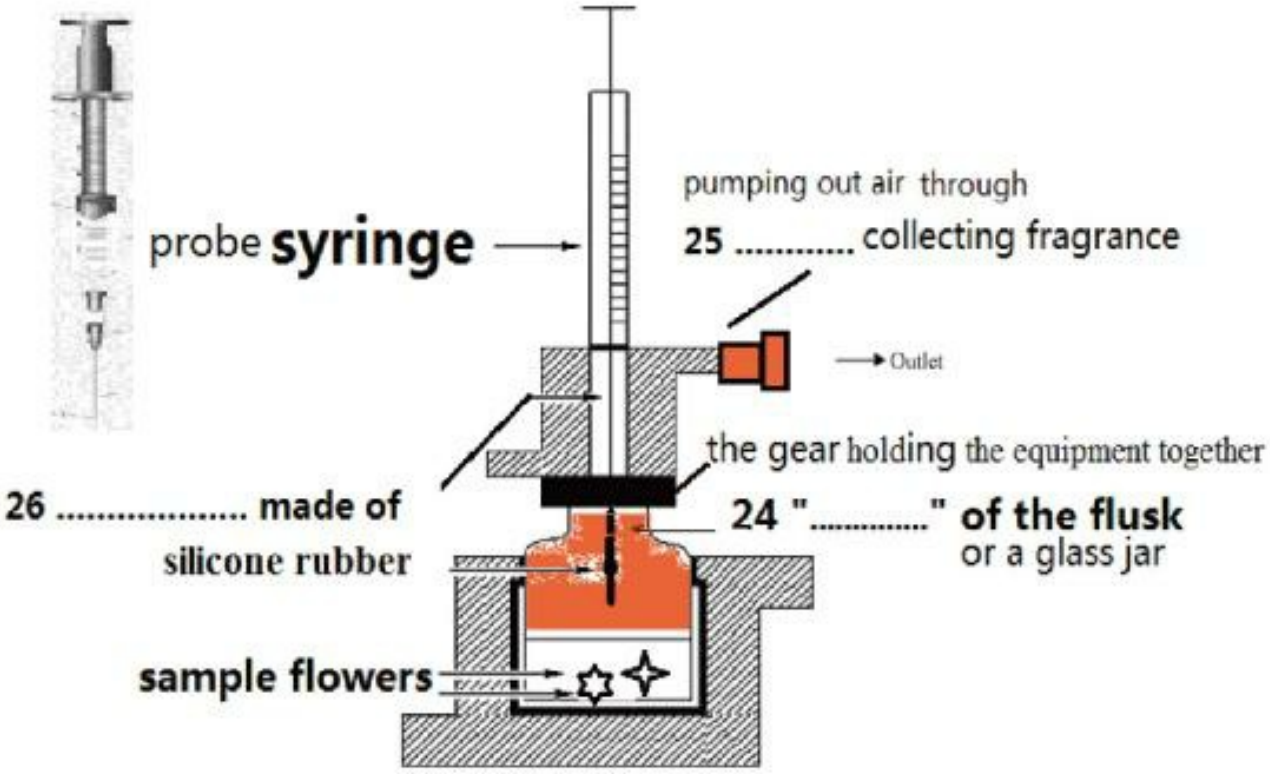
22 The technique the hunters used to trap fragrance molecules is totally out of their ; ingenuity.

23 Most customers prefer the perfume made of substance extracted from the musk I glands of animals.

Questions 24-26

Filling the blanks and answer the questions below with only one word.

A simple device used to trap molecules



Section 3

The Exploration of Mars

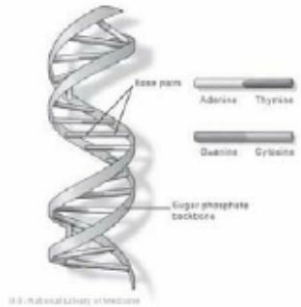
A. In 1877, Giovanni Schiaparelli, an Italian astronomer, made drawings and maps of the Martian surface that suggested strange features. The images from telescopes at this time were not as sharp as today's. Schiaparelli said he could see a network of lines, or canali. In 1894, an American astronomer, Percival Lowell, made a series of observations of Mars from his own observations of Mars from his own observatory at Flagstaff, Arizona, USA. Lowell was convinced a great network of canals had been dug to irrigate crops for the Martian race! He suggested that each canal had

fertile vegetation on either side, making them noticeable from Earth. Drawings and globes he made show a network of canals and oases all over the planet.

B. The idea that there was intelligent life on Mars gained strength in the late 19th century. In 1898, H.G. Wells wrote a science fiction classic, The War of the Worlds about an invading force of Martians who try to conquer Earth. They use highly advanced technology (advanced for 1898) to crush human resistance in their path. In 1917, Edgar Rice Burroughs wrote the first in a series of 11 novels about Mars. Strange beings and rampaging Martian monsters gripped the public's imagination. A radio broadcast by Orson Welles on Halloween night in 1938 of The War of the Worlds caused widespread panic across America. People ran into the streets in their pyjamas-millions believed the dramatic reports of a Martian invasion.

C. Probes are very important to our understanding of other planets. Much of our recent knowledge comes from these robotic missions into space. The first images sent back from Mars came from Mariner 4 in July 1965. They showed a cratered and barren landscape, more like the surface of our moon than Earth. In 1969, Mariners 6 and 7 were launched and took 200 photographs of Mars's southern hemisphere and pole on fly-by missions. But these showed little more information. In 1971, Mariner 9's mission was to orbit the planet every 12 hours. In 1975, The USA sent two

Viking probes to the planet, each with a lander and an orbiter. The Landers had sampler arms to scoop up Maritain rocks and did experiments to try and find signs of life. Although no life was found, they sent back the first colour pictures of the planet's surface and atmosphere from pivoting cameras.



D. The Martian meteorite found in Earth aroused doubts to the above analysis. ALH84001 meteorite was discovered in December 1984 in Antarctica, by members of the ANSMET project; The sample was ejected from Mars about 17 million years ago and spent 11,000 years in or on the Antarctic ice sheets. Composition analysis by NASA revealed a kind of magnetite that on Earth, is only found in association with certain microorganisms. Some structures resembling the mineralized casts of terrestrial bacteria and their appendages fibrils or by-products occur in the rims of carbonate globules and pre-terrestrial aqueous alteration regions. The size and shape of the objects is consistent with Earthly fossilized nanobacteria but the existence of nanobacteria itself is still controversial.

E. In 1965, the Mariner 4 probe discovered that Mars had no global magnetic field that would protect the planet from potentially life-threatening cosmic radiation and solar radiation; observations made in the late 1990s by the Mars Global Surveyor confirmed this discovery. Scientists speculate that the lack of magnetic shielding helped the solar wind blow away much of Mars's atmosphere over the course of several billion years. After mapping cosmic radiation levels at various depths on Mars, researchers have concluded that any life within the first several meters of the planet's surface would be killed by lethal doses of cosmic radiation. In 2007, it was calculated that DNA and RNA damage by cosmic radiation would limit life on Mars to depths greater than 7.5 metres below the planet's surface. Therefore, the best potential locations for discovering life on Mars may be at subsurface environments that have not been studied yet. Disappearance of the magnetic field may played an significant role in the process of Martian climate change. According to the valuation of the scientists, the climate of Mars gradually transits from warm and wet to cold and dry after magnetic field vanished.

F. NASA's recent missions have focused on another question: whether Mars held lakes or oceans of liquid water on its surface in the ancient past. Scientists have found hematite, a mineral that forms in the presence of water. Thus, the mission of the Mars Exploration Rovers of 2004 was not to look for present or past life, but for evidence of liquid water on the surface of Mars in the planet's ancient past. Liquid water, necessary for Earth life and for metabolism as generally conducted by species on Earth, cannot exist on the surface of Mars under its present

low atmospheric pressure and temperature, except at the lowest shaded elevations for short periods and liquid water does not appear at the surface itself. In March 2004, NASA announced that its rover Opportunity had discovered evidence that Mars was, in the ancient past, a wet planet. This had raised hopes that evidence of past life might be found on the planet today. ESA confirmed that the Mars Express orbiter had directly detected huge reserves of water ice at Mars' south pole in January 2004.

G. Researchers from the Center of Astrobiology (Spain) and the Catholic University of the North in Chile have found an 'oasis' of microorganisms two meters below the surface of the Atacama Desert, SOLID, a detector for signs of life which could be used in environments similar to subsoil on Mars. "We have named it a 'microbial oasis' because we found microorganisms developing in a habitat that was rich in rock salt and other highly hygroscopic compounds that absorb water" explained Victor Parro, researcher from the Center of Astrobiology in Spain. "If there are similar microbes on Mars or remains in similar conditions to the ones we have found in Atacama, we could detect them with instruments like SOLID" Parro highlighted.

H. Even more intriguing, however, is the alternative scenario by Spanish scientists: If those samples could be found to that use DNA, as Earthly life does, as their genetic code. It is extremely unlikely that such a highly specialised, complex molecule like DNA could have evolved separately on the two planets, indicating that there must be a common origin for Martian and Earthly life. Life based on DNA first appeared on Mars and then spread to Earth, where it then evolved into the myriad forms of plants and creatures that exist today. If this was found to be the case, we would have to face the logical conclusion: we are all Martian. If not, we would continue to search the life of signs.

Questions 27-32

The reading Passage has seven paragraphs A-H.

Which paragraph contains the following information?

Write the correct letter A- H, in boxes *27-32* on your answer sheet.

27 Martian evidence on Earth

28 Mars and Earth may share the same life origin

29 certain agricultural construction was depicted specifically

30 the project which aims to identify life under similar condition of Mars

31 Mars had experienced terrifying climate transformation

32 Attempts in scientific investigation to find liquid water

Questions 33-36

Choose the correct letter, A, B, c or D.

Write your answers in boxes 33-36 on your answer sheet.

33 How did *Percival Lowell* describe Mars in this passage?

A. Perfect observation location is in Arizona.

B. Canals of Mars are broader than that of the earth,

C. Dedicated water and agriculture trace is similar to the earth.

D. Actively moving Martian lives are found by observation.

34 How did people change their point of view towards Mars *from 19th century*?

A. They experienced Martian attack.

B. They learned knowledge of mars through some literature works.

C. They learned new concept by listening famous radio program.

D. They attended lectures given by famous writers.

35 In 1960s, which information is correct about Mars by a number of Probes sent to the space?

A. It has a landscape full of rock and river

B. It was not as vivid as the earth

C. It contained the same substance as in the moon

D. It had different images from the following probes

36 What is the implication of project proceeded by technology called SOLID in *Atacama Desert?*

A. It could be employed to explore organisms under Martian condition.

B. This technology could NOT be used to identify life on similar condition of Mars.

C. Atacama Desert is the only place that has a suitable environment for organisms.

D. Life had not yet been found yet in Atacama Desert.

Questions 37-40

Do the following statements agree with the information given in Reading Passage 1?

In boxes 37-40 on your answer sheet, write

TRUE *if the statement is true*

FALSE *if the statement is false*

NOT GIVEN *if the information is not given in the passage*

37 Technology of Martian creature was superior than what human had at that time in every field according to *The War of the Worlds*.

38 Proof sent by Viking probes has not been challenged yet.

39 Analysis on meteorite from Mars found a substance which is connected to some germs.

40 According to Victor Parro, their project will be deployed on Mars after they identified DNA

substance on earth.

Reading Test 14

Section 1

Traditional Farming System in Africa

A. By tradition land in Luapula is not owned by individuals, but as in many other parts of Africa is allocated by the headman or headwoman of a village to people of either sex, according to need. Since land is generally prepared by hand, one ulupwa cannot take on a very large area; in this sense land has not been a limiting resource over large parts of the province. The situation has already changed near the main townships, and there has long been a scarcity of land for cultivation in the Valley. In these areas registered ownership patterns are becoming prevalent.

B. Most of the traditional cropping in Luapula, as in the Bemba area to the east, is based on citemene, a system whereby crops are grown on the ashes of tree branches. As a rule, entire trees are not felled, but are pollarded so that they can regenerate. Branches are cut over an area of varying size early in the dry season, and stacked to dry over a rough circle about a fifth to a tenth of the pollarded area. The wood is fired before the rains and in the first year planted with the African cereal finger millet (Eleusine coracana).

C. During the second season, and possibly for a few seasons more the area is planted to variously mixed combinations of annuals such as maize, pumpkins (Telfiria occidentalis) and other cucurbits, sweet potatoes, groundnuts, Phaseolus beans and various leafy vegetables, grown with a certain amount of rotation. The diverse sequence ends with vegetable cassava, which is often planted into the developing last-but-one crop as a relay.

D. Richards (1969) observed that the practice of citemene entails a definite division of labour between men and women. A man stakes out a plot in an unobtrusive manner, since it is considered provocative towards one's neighbours to mark boundaries in an explicit way. The dangerous work of felling branches is the men's province, and involves much pride. Branches are stacke by the women, and fired by the men. Formerly women and men cooperated in the planting work, but the harvesting was always done by the women. At the beginning of the cycle little weeding is necessary, since the firing of the branches effectively destroys weeds. As the cycle progresses weeds increase and nutrients eventually become depleted to a point where further effort with annual crops is judged to be not worthwhile: at this point the cassava is planted, since it can produce a crop on nearly exhausted soil. Thereafter the plot is abandoned, and a new area pollarded for the next citemene cycle.

E. When forest is not available - this is increasingly the case nowadays -

various ridging systems (ibala) are built on small areas, to be planted with combinations of maize, beans, groundnuts and sweet potatoes, usually relayed with cassava. These plots are usually tended by women, and provide subsistence. Where their roots have year-round access to water tables mango, guava and oil-palm trees often grow around houses, forming a traditional agroforestry system. In season some of the fruit is sold by the roadside or in local markets.

F. The margins of dambos are sometimes planted to local varieties of rice during the rainy season, and areas adjacent to vegetables irrigated with water from the dambo during the dry season. The extent of cultivation is very limited, no doubt because the growing of crops under dambo conditions calls for a great deal of skill. Near towns some of the vegetable produce is sold in local markets.

G. Fishing has long provided a much needed protein supplement to the diet of Luapulans, as well as being the one substantial source of cash. Much fish is dried for sale to areas away from the main waterways. The Mweru and Bangweulu Lake Basins are the main areas of year-round fishing, but the Luapula River is also exploited during the latter part of the dry season. Several previously abundant and desirable species, such as the Luapula salmon or mpumbu (Labeo altivelis) and pale (Sarotherodon machochir) have all but disappeared from Lake Mweru, apparently due to mismanagement.

H. Fishing has always been a far more remunerative activity in Luapula that crop husbandry. A fisherman may earn more in a week than a bean or maize grower in a whole season. I sometimes heard claims that the relatively high earnings to be obtained from fishing induced an ‘easy come, easy go’ outlook among Luapulan men. On the other hand, someone who secures good but erratic earnings may feel that their investment in an economically productive activity is not worthwhile because Luapulans fail to cooperate well in such activities. Besides, a fisherman with spare cash will find little in the way of working equipment to spend his money on. Better spend one's money in the bars and have a good time!

I. Only small numbers of cattle or oxen are kept in the province owing to the prevalence of the tse-tse fly. For the few herds, the dambos provide subsistence grazing during the dry season. The absence of animal draft power greatly limits peoples' ability to plough and cultivate land: a married couple can rarely manage to prepare by hand-hoeing. Most people keep freely roaming chickens and goats. These act as a reserve for bartering, but may also be occasionally slaughtered for ceremonies or for entertaining important visitors. These animals are not a regular part of most peoples' diet.

J. Citemene has been an ingenious system for providing people with seasonal production of high quality cereals and vegetables in regions of acid, heavily leached soils. Nutritionally, the most serious deficiency was that of protein. This could at times be alleviated when fish was available, provided that cultivators lived near the Valley and could find the means of bartering for dried fish. The citemene/fishing system was well adapted to the ecology of the miombo regions and sustainable

for long periods, but only as long as human population densities stayed at low levels. Although population densities are still much lower than in several countries of South-East Asia, neither the fisheries nor the forests and woodlands of Luapula are capable, with unmodified traditional practices, of supporting the people in a sustainable manner.

Overall, people must learn to intensify and diversify their productive systems while yet ensuring that these systems will remain productive in the future, when even more people will need food. Increasing overall production offood, though a vast challenge in itself, will not be enough, however. At the same time storage and distribution systems must allow everyone access to at least a moderate share of the total.

You should spend about 20 minutes on question 1-13, which are based on reading passage 1 on the

following pages.

Questions 1-4

Complete the sentences below with words taken from Reading Passage!.

*Choose **NO MORE THAN TWO WORDS** from the passage for each answer. Write your answers in boxes 1-4 on your answer sheet.*

1 In Luapula land allocation is in accordance with.....

2 The citemene system provides the land with.....where crops are planted.

3 During the second season, the last planted crop is.....

4 Under suitable conditions, fruit trees are planted near.....

Questions 5-8

Classify the following items with the correct description. Write your answers in boxes 5-8 on your answer sheet

A. fish

B. oxen

C. goats

---

5. be used in some unusual occasions, such as celebrations.
6. cannot thrive for being affected by the pests.
7. be the largest part of creating profit.
8. be sold beyond the local area.

Questions 9-12

Do the following statements agree with the information given in Reading Passage 1? In boxes 9-12 on your answer sheet, write

TRUE	*if the statement agrees with the information*

FALSE	*if the statement contradicts the information*
NOT QVEN	*if there is no information on this*

9. People rarely use animals to cultivate land.
10. When it is a busy time, children usually took part in the labor force.
11. The local residents eat goats on a regular time.
12. Though citemene has been a sophisticated system, it could not provide enough protein.

Questions 13

*Choose the correct letter. A, B, **c** or D.*

Write the correct letter in the box 13 on your answer sheet.

What is the writer's opinion about the traditional ways of practices?

A. They can supply the nutrition that people need.

B. They are not capable of providing adequate support to the population,

C. They are productive systems that need no more improving.

D. They will be easily modified in the future.

Section 2

Griffith and American films

Movies are key cultural artifacts that offer a window into American cultural and social history. A mixture of art, business, and popular entertainment, the movies provide a host of insights into Americans' shifting ideals, fantasies, and preoccupations

A. Many films of the early silent era dealt with gender relations. Before 1905, as Kathy Peiss has argued, movie screens were filled with salacious sexual imagery and risque humor, drawn from burlesque halls and vaudeville theaters. Early films offered many glimpses of women disrobing or of passionate kisses. As the movies' female audience grew, sexual titillation and voyeurism persisted. But an ever increasing number of film dealt with the changing work and sexual roles of women in a more sophisticated manner. While D.w. Griffith's films presented an idealized picture of the frail Victorian child-woman, and showed an almost obsessive preoccupation with female honor and chastity, other silent movies presented quite different images of femininity. These ranged from the exotic, sexually aggressive vamp to the athletic, energetic "serial queen"; the street smart urban working gal, who repels the sexual advances of her lascivious boss; and cigarette-smoking, alcohol drinking chorus girls or burlesque queens.

B. In early 1910, director D.w. Griffith was sent by the Biograph Company to the west coast with his acting troupe, consisting of actors Blanche Sweet, Lillian Gish, Mary Pickford, Lionel Barrymore, and others. While there, the company decided to explore new territories, traveling several miles north to Hollywood, a little village that was friendly and enjoyed the movie company filming there. By focusing the camera on particular actors and actresses, Griffith inadvertently encouraged the development of the star system. As early as 1910, newspapers were deluged with requests for actors' names. But most studios refused to divulge their identities, fearing the salary demands of popular performers. As one industry observer put it, "In the 'star' your producer gets not only a 'production' value...but a 'trademark' value, and an 'insurance' value which are...very potent in guaranteeing the sale of this product." As the star system emerged, salaries soared. In the course of just two years, the salary of actress Mary Pickford rose from less than $400 a week in 1914 to $10,000 a week in 1916. This action made Griffith believe the big potential in movie industry. Thus many competitors completely copy the same system as Griffith used, for the considerable profits. Additionally, they also study the theory and methods which Griffith suggested.

C. From the moment America entered the war, Hollywood feared that the industry would be subject to heavy-handed government censorship. But the government itself wanted no repeat of World War I, when the Committee on Public Information had whipped up anti-German hysteria and oversold the war as "a Crusade not merely to re-win the tomb of Christ, but to bring back to earth the rule of right, the peace, goodwill to men and gentleness he taught."

D. The formation of the movie trust ushered in a period of rationalization within the film industry. Camera and projecting equipment was standardized; film rental fees were fixed; theaters were upgraded; which improved the quality of movies by removing damaged prints from cnculation. This was also a period intense artistic and technical innovation, as pioneering directors like David Wark Griffith and others created a new language of film and revolutionized screen narrative.

E. With just six months of film experience, Griffith, a former stage actor, was hired as a director by the Biograph Company and promised $50 a week and one-twentieth of a cent for every foot of film sold to a rental exchange. Each week, Griffith turned out two or three one-reelers. While earlier directors had used such cinematic devices as close ups, slow motion, fade-ins and fade-outs, lighting effects, and editing before, Griffith's great contribution to the movie industry was to show how these techniques could be used to create a wholly new style of storytelling, distinct from the theater. Griffith's approach to movie storytelling has been aptly called "photographic realism. "This is not to say that he merely wished to record a story accurately; rather he sought to convey the illusion of realism. He demanded that his performers act less in a more lifelike manner, avoiding the broad, exaggerated gestures and pantomiming of emotions that characterized the nineteenth century stage. He wanted his performers to take on a role rather than directly addressing the camera. Above all, he used close-ups, lighting, editing, and other cinematic techniques convey suspense and other emotions and to focus the audience's attention on individual performers.

F. During the 1920s and 1930s, a small group of film companies consolidated then control. Known as the "Big Five" - Paramount, Warner Brothers, RKO, 20th Century-Fox, and Lowe's (MGM) and the "Little Three" - Universal, Columbia, and United Artists, they formed fully integrated companies. The old film company's opposition was shocked by new tycoons. The confusion of tongues in the foreign version of American films deepened when American directors themselves embarked on the shooting of the new version. They did not usually speak Spanish (or the given target language) and, at that time, there were only few translators at the studio's disposal. For this reason, it was more general to contract Spanish directors, actors, and screenwriters to produce American films in Spanish for Latin American audiences and for the public in the Iberian Peninsula. Hollywood had depended on overseas markets for as much as 40 percent of its revenue. But in an effort to nurture then own film industries and prevent an excessive outflow of dollars, Britain, France, and Italy imposed stiff import tariffs and restrictive quotas on imported American movies.

G. A basic problem facing today's Hollywood is the rapidly rising cost of making and marketing a movie: an average of $40 million today. The immense cost of producing movies has led the studios to seek guaranteed hits: blockbuster loaded with high-tech special effects, sequels, and remakes of earlier movies, foreign films, and even old TV shows. Hollywood has also sought to cope with rising costs by focusing ever more intently on its core audiences. Since the mid-1980s, the movie going audience has continued to decrease in size. Ticket sales fell from 1.2 billion in 1983 to 950 million in 1992, with the biggest drop occurring among adults. And since over half of Hollywood's profits are earned overseas, the target market has to be changed due to the increasing costs and salary of making a film. The industry has concentrated much of its energy on crude action films easily understood by an international audience, featuring stars like Arnold Schwarzenegger and Sylvester Stallone.

Questions 14-19

Reading passage 2 has six paragraphs, A-F.

Choose the correct heading for each paragraph from the list of headings below. Write the correct number, i-x, in boxes 14-20 on your answer sheet.

List of Headings

i. Detailed description for film system

ii. Griffith's contribution to American films

iii. The gender in development of American film

iv. Change the view of the American movie

V. People's reaction to making movies in the war period

vi. The increasing market of film in society

vii. Griffith improved the gender recognition in society

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14 Paragraph A

15 Paragraph B

16 Paragraph c

17 Paragraph D

18 Paragraph E

19 Paragraph F

Questions 20-23

Use the information in the passage to match the companies (listed A-C) with opinions or deeds below. Write the appropriate letters A, B, c or D in boxes 20-23 on your answer sheet

A. old company's opposition

B. huge drop happens among adults

C. the pressure to change its market

D. completely copy his system

---

20 Griffith's successful in 1910s, led his rivals

21 The growing costs and salary in Hollywood which shows it has

22 The increasing new movie industries have a big impact on

23 In 1992, ticket sales declined dramatically, due to

Questions 24-26

Choose the correct letter. A, B, c or D. Write your answer in boxes 36-38 on your answer sheet

24. Why Griffith believe the potential in making movies?

A. The gender development in American films

B. He used the star system successfully

C. He prefer the advanced movie techniques

D. He earns lots of money

25. What are other competitors' reaction to Griffith?

A. Adopt Griffith's theory and methods in making films

B. Completely copy his theory and methods

C. Try to catch up their innovations

D. Find a new system to against Griffith

26. What is the great change in films industries during 1920s and 1930s?

A. Try to seek the high-tech special efforts

B. Dismiss the needs of overseas audiences

C. Changed its goal market

D. Improved the foreign version of American movies

Section 3

The Persuaders

A We have long lived in an age where powerful images, catchy soundbites and too-good-to miss offers bombard from every quarter. All around US the persuaders are at work. Occasionally their methods are unsubtle—the planting kiss on a baby's head by a wannabe political leader, or a liquidation sale in a shop that has been "closing down" for well over a year, but generally the persuaders know what they are about and are highly capable. Be they politicians, supermarket chains, salespeople or advertisers, they know exactly what to do to sell us their images, ideas or produce. When it comes to persuasion, these giants rule supreme. They employ the most skilled image-makers and use the best psychological tricks to guarantee that even the most cautious among US are open to manipulation.

B. We spend more time in them than we mean to, we buy 75 percent of our food from them and end up with products that we did not realize we wanted. Right form the start, supermarkets have been ahead of the game. For example, when Sainsbury introduced shopping baskets into its 1950s stores, it was a stroke of marketing genius. Now shoppers could browse and pick up items they previously would have ignored. Soon after came trolleys, and just as new roads attract more traffic, the same applied to trolley space. Pro Merlin Stone, IBM Professor of Relationship Marketing at Bristol Business School, says aisles are laid out to maximize profits. Stores pander to our money-rich, time-poor lifestyle. Low turnover products clothes and electrical goods are stocked at the back while high turnover items command position at the front.

C. Stone believes supermarkets work hard to "stall" US because the more time we spend in them, the more we buy. Thus, great efforts are made to make the environment pleasant. Stores play music to relax US and some even pipe air from the in-store bakery around the shop. In the USA, fake aromas are sometimes used. Smell is both the most evocative and subliminal sense. In experiments, pleasant smells are effective in increasing our spending. A casino that fragranced only half its premise saw profit soar in the aroma—filled areas. The other success story from the supermarkets' perspective is the loyalty card. Punters may assume that they are being rewarded for their fidelity, but all the while they are trading information about their shopping habits. Loyal shoppers could be paying 30% more by sticking to their favourite shops for essential cosmetics

D. Research has shown that 75 percent of profit comes from just 30 percent of customers. Ultimately, reward cards could be used to identify and better accommodate these "elite" shoppers. It could also be used to make adverts more relevant to individual consumers—rather like Spielberg's futuristic

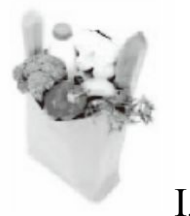
thriller Minority Report, in which Tom Cruise's character is bombarded with interactive personalized ads. If this sounds far-fetched, the data-gathering revolution has already seen the introduction of radio—frequency identification—away to electronically tag products to see who is buying what, FRID means they can follow the product into people homes.

E. No matter how savvy we think we are to then ploys, the ad industry still wins. Adverts focus on what products do or on how they make US feel. Researcher Laurette Dube, in the Journal of Advertising Research, says when attitudes are base on "cognitive foundations" (logical reasoning), advertisers use informative appeals. This works for products with little emotional draw but high functionality, such as bleach. Where attitude are based on effect (i.e, emotions), ad teams try to tap into our feelings. Researchers at the University of Florida recently concluded that our emotional responses to adverts dominate over "cognition".

F. Advertisers play on our need to be safe (commercials for insurance), to belong (make customer feel they are in the group in fashion ads) and for self-esteem (aspirational adverts). With time and space at a premium, celebrities are often used as a quick way of meeting these needs—either because the celeb epitomizes success or because they seem familiar and so make the product seem "safe". A survey of 4,000 campaigns found ads with celebs were 10 percent more effective than without. Humor also stimulates a rapid emotional response. Hwiman Chung, writing in the International Journal of Advertising, found that funny ads were remembered for longer than straight ones. Combine humor with sexual imagery—as in Wonderbra's "Hello Boys" ads—and you are on to a winner.

G. Slice-of-life ads are another tried and tested method—they paint a picture of life as you would like it, but still one that feels familiar. Abhilasha Mehta, in the Journal of Advertising Research, noted that the more one's self-image tallies with the brand being advertised, the stronger the commercial. Ad makers also use behaviorist theories, recognizing that the more sensation we receive from an object, the better we know it. If an advert for a chocolate bar fails to cause salivation, it has probably failed. No wonder advertisements have been dubbed the "nervous system of the business world".

H. Probably all of US could make a sale if the product was something we truly believed in, but professional salespeople are in a different league the best of them can always sell different items to suitable customers in a best time. They do this by using very basic psychological techniques. Stripped to its simplest level, selling works by heightening the buyer's perception of how much they need a product or service. Buyers normally have certain requirements by which they will judge the suitability of a product. The seller therefore attempts to tease out what these conditions are and then explains how then products' benefit can meet these requirements.



I. Richard Hession, author of Be a Great Salesperson says it is human nature to prefer to speak rather to listen, and good salespeople pander to this. They ask punters about then needs and

offer to work with them to achieve then objectives. As a result, the buyer feels they are receiving a "consultation" rather than a sales pitch. All the while, the salesperson presents with a demeanour that takes it for granted that the sale will be made. Never will the words "if you buy" be used, but rather "when you buy".

J. Dr Rob Yeung, a senior consultant at business psychologists Kiddy and Partner, says most salespeople will build up a level of rapport by asking questions about hobbies, family and lifestyle. This has the double benefit of making the salesperson likeable while furnishing him or her with more information about the client's wants. Yeung says effective salespeople try as far as possible to match their style of presenting themselves to how the buyer comes across. If the buyer cracks jokes, the salespeople will respond in kind. If the buyer wants detail, the seller provides it, if they are more interested in the feel of the product, the seller will focus on this. At its most extreme, appearing empathetic can even include the salesperson attempting to "mirror" the hobby language of the buyer.

K. Whatever the method used, all salespeople work towards one aim: "closing the deal". In fact, they will be looking for "closing signals" through then dealings with potential clients. Once again the process works by assuming success. The buyer is not asked "are you interested?" as this can invite a negative response. Instead the seller takes it for granted that the deal is effectively done: when the salesman asks you for a convenient delivery date or asks what color you want, you will probably respond accordingly. Only afterwards might you wonder why you proved such a pushover.

Questions 27-29

Choose the correct letter, A, B, ***c*** *or D.*

Write your answer in boxes 27-29 on your answer sheet.

27 What is the supermarket's purpose of using "basket" in paragraph B?

A Create a convenient atmosphere of supermarket

B Make customers spend more time on shopping

C. Relieve pressure on supermarket's traffic

D More than half items bought need carried

28 What is the quality of a best salesman possessed according to this passage?

A Sell the right product to right person

B Clearly state the instruction of a product

C Show professional background of one product

D Persuade customers to buy the product they sell

29 What's the opinion of Richard Hession?

A Pretend to be nice instead of selling goods

B Prefer to speak a lot to customers

C Help buyers to conclude then demands for ideal items

D Show great interpersonal skill

Questions 30-35

Reading Passage 3 has 7 paragraphs A-K. Which paragraph contains the following information? Write your answers in boxes 30-35 on your answer sheet.

NB: You may use any letter more than once.

30 how do supermarkets distract consumers

31 how to build a close relationship between salespeople and buyer

32 people would be impressed by humor advertisement

33 methods for salespeople to get the order

34 how questions work for salespeople

35 different customer groups bring different profits

Questions 36-40

Complete the notes below using NO MORE THAN TWO WORDS from the passage.
Write your answers in boxes 36-40 on your answer sheet.

Trolleys are bom for the increasing traffic in supermarket. The width of 36.....in supermarkets is broadened in order to generate the most profits. Research from 37....., satisfying aromas can motivate people buy more products. Except the effort of creating a comfortable surroundings, 38..... is another card that supermarkets play to reward their regular customers. For example, loyal customers spend 30% more in their loved shops for everyday necessary 39.....Clothes shops use advertisements to make buyer think they are belonging to part of a 40.....; research from 4,000 campaigns reflect that humor advertisement received more emotional respect.

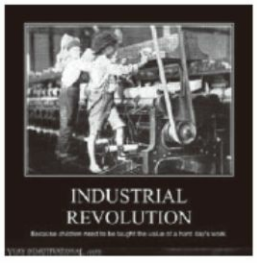
Reading Test 15

Section 1

Tea and Industrial Revolution

A. Alan Macfarlane thinks he could rewrite history. The professor of anthropological science at King's College, Cambridge has, like other historians, spent decades trying to understand the enigma of the Industrial Revolution. Why did this particular important event - the world-changing birth of industry - happen in Britain? And why did it happen at the end of the 18th century?

B. Macfarlane compares the question to a puzzle. He claims that there were about 20 different factors and all of them needed to be present before the revolution could happen. The chief conditions are to be found in history textbooks. For industry to 'take off', there needed to be the technology and power to drive factories, large urban populations to provide cheap labour easy transport to move goods around, an affluent middle-class willing to buy mass-produced objects, a market-driven economy, and a political system that allowed this to happen. While this was the case for England, other nations, such as Japan, Holland and France also met some of these criteria. All these factors must have been necessary but not sufficient to cause the revolution. Holland had everything except coal, while China also had many of these factors.



C. Most historians, however, are convinced that one or two missing factors are needed to solve the puzzle. The missing factors, he proposes, are to be found in every kitchen cupboard. Tea and beer, two of the nation's favorite drinks, drove the revolution. Tannin, the active ingredient in tea, and hops, used in making beer, both contain antiseptic properties. This -plus the fact that both are made with boiled water- helped prevent epidemics of waterborne diseases, such as dysentery, in densely populated urban areas. The theory initially sounds eccentric but his explanation of the detective work that went into his deduction and the fact his case has been strengthened by a favorable appraisal of his research by Roy Porter (distinguished medical historian) the skepticism gives way to wary admiration.

D. Historians had noticed one interesting factor around the mid-18th century that required explanation. Between about 165D and 1740, the population was static. But then there was a burst in population. The infant mortality rate halved in the space of 20 years, and this happened in both rural areas and cities, and across all classes. Four possible causes have been suggested. There could have been a sudden change in the viruses and bacteria present at that time, but this is unlikely. Was there a revolution in medical science? But this was a century before Lister introduced antiseptic surgery. Was

there a change in environmental conditions? There were improvements in agriculture that wiped out malaria, but these were small gains. Sanitation did not become widespread until the 19th century. The only option left was food. But the height and weight statistics show a decline. So the food got worse. Efforts to explain this sudden reduction in child deaths appeared to draw a blank.

E. This population burst seemed to happen at just the right time to provide labor for the Industrial

Revolution. But why? When the Industrial Revolution started, it was economically efficient to have people crowded together forming towns and cities. But with crowded living conditions comes disease, particularly from human waste. Some research in the historical records revealed that there was a change in the incidence of waterborne disease at that time, the English were protected by the strong antibacterial agent in hops, which were added to make beer last. But in the late 17th century a tax was introduced on malt. The poor turned to water and gin, and in the 1720s the mortality rate began to rise again.

F. Macfarlane looked to Japan, which was also developing large cities about the same time, and also had no sanitation. Waterborne diseases in the Japanese population were far fewer than those in Britain. Could it be the prevalence of tea in their culture? That was when Macfarlane thought about the role of tea in Britain. The history of tea in Britain provided an extraordinary coincidence of dates. Tea was relatively expensive until Britain started direct hade with China in the early 18th century. By the 1740s, about the time that infant mortality was falling, the drink was common. Macfarlane guesses that the fact that water had to be boiled, together with the stomach-purifying properties of tea so eloquently described in Buddhist texts, meant that the breast milk provided by mothers was healthier than it had ever been. No other European nation drank tea so often as the British, which, by Macfarlane's logic, pushed the other nations out of the race for the Industrial Revolution.

G. But, if tea is a factor in the puzzle, why didn't this cause an industrial revolution in Japan? Macfarlane notes that in the 17th century, Japan had large cities, high literacy rates and even a futures market. However, Japan decided against a work-based revolution, by giving up labor-saving devices even animals, to avoid putting people out of work. Astonishingly, the nation that we now think of as one of the most technologically advanced, entered the 19th century having almost abandoned the wheel. While Britain was undergoing the Industrial Revolution, Macfarlane notes wryly, Japan was undergoing an industrious one.

Questions 1-7

Reading passage 1 has seven paragraphs, A-G

Choose the correct heading for paragraphs A -G from the list of headings below. Write the correct number, i-x, in boxes 1-7 on your answer sheet

List of headings

i Cases of Japan, Holland and France

ii City development in Japan

iii Tea drinking in Japan and Britain

iv Failed to find a plausible cause for mystery about lower mortality rate

V Preconditions necessary for industrial revolution

vi Time and place of industrialization

vii Conclusion drawn from the comparison with Japan

viii Relation between population and changes of drink in Britain

ix Two possible solutions to the puzzle

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1 Paragraph A

2 Paragraph B

3 Paragraph c

4 Paragraph D

5 Paragraph E

6 Paragraph F

7 Paragraph G

Questions 8-13

Do the following statements agree with the information given in Reading Passage 1? In boxes 8-13 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

8 The industrialization did not happen in China because of its inefficient railway transportation.

9 Tea and beer contributed to protect people from waterborne disease.

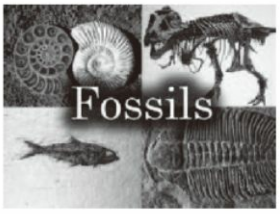
10 Roy Porter disagreed with the proposed theory about the missing factors

11 The reason of lower child deaths is fully explained by food.

12 The British made beer by themselves.

13 Tax on malt indirectly affected the increase of population in late 17th century

Section 2



Fossil files: "The Paleobiology Database"

A. Are we now living through the sixth extinction as our own activities destroy ecosystems and wipe

out diversity? That's the doomsday scenario painted by many ecologists, and they may well be right. The trouble is we don't know for sure because we don't have a clear picture of how life changes between extinction events or what has happened in previous episodes. We don't even know how many species are alive today, let alone the rate at which they are becoming extinct. A new project aims to fill some of the gaps. The Paleobiology Database aspires to be an online repository of information about every fossil ever dug up. It is a huge undertaking that has been described as biodiversity's equivalent of the Human Genome Project. Its organizers hope that by recording the history of biodiversity they will gain an insight into how environmental changes have shaped life on Earth in the past and how they might do so in the future. The database may even indicate whether life can rebound no matter what we throw at it, or whether a human induced extinction could be without parallel, changing the rules that have applied throughout the rest of the planet's history.

B. But already the project is attracting harsh criticism. Some experts believe it to be seriously flawed. They point out that a database is only as good as the data fed into it, and that even if all the current fossil finds were catalogued, they would provide an incomplete inventory of life because we are far from discovering every fossilised species. They say that researchers should get up from their computers and get back into the dirt to dig up new fossils. Others are more sceptical still, arguing that we can never get the full picture because the fossil record is riddled with holes and biases.

C. Fans of the Paleobiology Database acknowledge that the fossil record will always be incomplete. But they see value in looking for global patterns that show relative changes in biodiversity. "The fossil record is the best tool we have for understanding how diversity and extinction work in normal times," says John Alroy from the National Center for Ecological Analysis and Synthesis in Santa Barbara. "Having a background extinction estimate gives US a benchmark for understanding the mass extinction that's currently under way. It allows us to say just how bad it is in relative terms."

D. To this end, the Paleobiology Database aims to be the most thorough attempt yet to come up with good global diversity curves. Every day between 10 and 15 scientists around the world add information about fossil finds to the database. Since it got up and running in 1998, scientists have entered almost 340,000 specimens, ranging from plants to whales to insects to dinosaurs to sea urchins. Overall totals are updated hourly at www.paleodb.org. Anyone can download data from the public part of the site and play with the numbers to their heart's content. Already, the database has thrown up some surprising results. Looking at the big picture, Alroy and his colleagues believe they have found evidence that biodiversity reached a plateau long ago, contrary to the received wisdom that species numbers have increased continuously between extinction events. "The traditional view is that diversity has gone up and up and up," he says. "Our research is showing that diversity limits were approached many tens of millions of years before the dinosaurs evolved, much less suffered extinction." This suggests that only a certain number of species can live on Earth at a time, filling a prescribed number of niches like spaces in a multi-storey car park. Once it's full, no more new species can squeeze in, until extinctions free up new spaces or something rare and catastrophic adds a

new floor to the car park.

E. Alroy has also used the database to reassess the accuracy of species names. His findings suggest that irregularities in classification inflate the overall number of species in the fossil record by between 32 and 44 per cent. Single species often end up with several names, he says, due to misidentification or poor communication between taxonomists in different countries. Repetition like this can distort diversity curves. "If you have really bad taxonomy in one short interval, it will look like a diversity spike—a big diversification followed by a big extinction-when all that has happened is a change in the quality of names," says Alroy. For example, his statistical analysis indicates that of the 4861 North American fossil mammal species catalogued in the database, between 24 and 31 per cent will eventually prove to be duplicates.

F. Of course, the fossil record is undeniably patchy. Some places and times have left behind more fossil-filled rocks than others. Some have been sampled more thoroughly. And certain kinds of creatures—those with hard parts that lived in oceans, for example--are more likely to leave a record behind, while others, like jellyfish, will always remain a mystery. Alroy has also tried to account for this. He estimates, for example, that only 41 per cent of North American mammals that have ever lived are known from fossils, and he suspects that a similar proportion of fossils are missing from other groups, such as fungi and insects.

G. Not everyone is impressed with such mathematical **wizardry.** Jonathan Adrain from the University of Iowa in Iowa City points out that statistical **wrangling** has been known to create mass extinctions where none occurred. It is easy to misinterpret data. For example, changes in sea level or inconsistent sampling methods can mimic major changes in biodiversity. Indeed, a recent and thorough examination of the literature on marine bivalve fossils has convinced David Jablonsky from the University of Chicago and his colleagues that their diversity has increased steadily over the past 5 million years.

H. With an inventory of all living species, ecologists could start to put the current biodiversity crisis in historical perspective. Although creating such a list would be a task to rival even the Palaeobiology Database, it is exactly what the San Francisco-based ALL Species Foundation hopes to achieve in the next 25 years. The effort is essential, says Harvard biologist Edward o. Wilson, who is alarmed by current rates of extinction. "There is a crisis. We've begun to measure it, and it's very high," Wilson says. "We need this kind of information in much more detail to protect all of biodiversity, not just the ones we know well." Let the counting continue.

Questions 14-19

The reading passage has seven paragraphs, A-F

Choose the correct heading for paragraphs A-Ffrom the l ὐ t below. Write the correct number, i-xi, in boxes 14-19 on your answer sheet.

List of Headings

i Potential error exists in the database

ii Supporter of database recleared its value

iii The purpose of this paleobiology data

iv Reason why some certain species were not included in it

v Duplication of breed but with different names

vi Achievement of Paleobiology Databasesince

vii Criticism on the project which is waste of fund

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14 Paragraph A

15 Paragraph B

16 Paragraph c

17 Paragraph D

18 Paragraph E

19 Paragraph F

Questions 20-22

Use the information in the passage to match the people (listed A-C) with opinions or deeds below. Write the appropriate letters A-C in boxes 20-22 on your answer sheet.

A. Jonathan Adrain

B. John Alroy

C. David Jablonsky

D. Edward o. Wilson

---

20 Creating the Database would help scientist to identify connections of all species.

21 Believed in contribution of detailed statistics should cover beyond the known species.

22 reached a contradictory finding to the tremendous species die-out.

Questions 23-24

Choose the TWO correct letter following

Write your answers in boxes 23-24 on your answer sheet.

*Please choose TWO CORRECT descriptions about the **The Paleobiology Database** in this passage:*

A. almost all the experts welcome this project

B. intrigues both positive and negative opinions from various experts

C. all different creature in the database have unique name

D. aims to embrace all fossil information globally

E. get more information from record rather than the field

Question 25-26

*Choose the correct letter, A, B, **c** or D.*

Write your answers in boxes 25-26 on your answer sheet.

25 According to the passage, jellyfish belongs to which category of ***The Paleobiology Database?***

A. repetition breed

B. untraceable species

C. specifically detailed species

D. currently living creature

26 What is the author's suggestion ***according to the end of passage?***

A. continue to complete counting the number of species in the Paleobiology Database

B. stop contributing The Paleobiology Database

C. try to create a database of living creature

D. study more in the field rather than in the book

Section 3

Communication in science

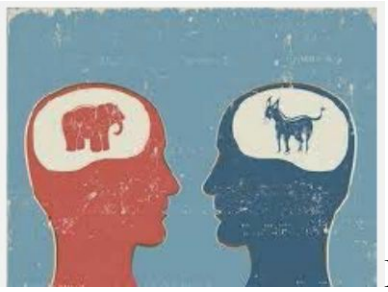
A. Science plays an increasingly significant role in people's lives, making the faithful communication of scientific developments more important than ever. Yet such communication is fraught with challenges that can easily distort discussions, leading to unnecessary confusion and misunderstandings.

B. Some problems stem from the esoteric nature of current research and the associated difficulty of finding sufficiently faithful terminology Abstraction and complexity are not signs that a given scientific direction is wrong, as some commentators have suggested, but are instead a tribute to the success of human ingenuity in meeting the increasingly complex challenges that nature presents. They can, however, make communication more difficult. But many of the biggest challenges for science reporting arise because in areas of evolving research, scientists themselves often only partly understand the full implications of any particular advance or development. Since that dynamic applies to most of the scientific developments that directly affect people's lives global warming, cancer research, diet studies — learning how to overcome it is critical to spurring a more informed scientific debate among the broader public.

C. Ambiguous word choices are the source of some misunderstandings. Scientists often employ colloquial terminology, which they then assign a specific meaning that is impossible to fathom without proper training. The term "relativity," for example, is intrinsically misleading. Many interpret the theory to mean that everything is relative and there are no absolutes. Yet although the measurements

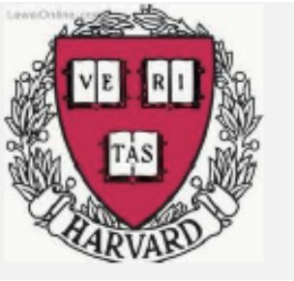
any observer makes depend on his coordinates and reference frame, the physical phenomena he measures have an invariant description that transcends that observer's particular coordinates. Einstein's theory of relativity is really about finding an invariant description of physical phenomena. True, Einstein agreed with the idea that his theory would have been better named *"Invarianten theorie."* But the term "relativity" was already entrenched at the time for him to change.

D. "The uncertainty principle" is another frequently abused term. It is sometimes interpreted as a limitation on observers and their ability to make measurements.



E. But it is not about intrinsic limitations on any one particular measurement; it is about the inability to precisely measure particular pairs of quantities simultaneously? The first interpretation is perhaps more engaging from a philosophical or political perspective. It's just not what the science is about.

F. Even the word "theory" can be a problem. Unlike most people, who use the word to describe a passing conjecture that they often regard as suspect, physicists have very specific ideas in mind when they talk about theories. For physicists, theories entail a definite physical framework embodied in a set of fundamental assumptions about the world that lead to a specific set of equations and predictions — ones that are borne out by successful predictions. Theories aren't necessarily shown to be correct or complete immediately. Even Einstein took the better part of a decade to develop the correct version of his theory of general relativity. But eventually both the ideas and the measurements settle down and theories are either proven correct, abandoned or absorbed into other, more encompassing theories.



G. "Global warming" is another example of problematic terminology. Climatologists predict more drastic fluctuations in temperature and rainfall —not necessarily that every place will be warmer. The name sometimes subverts the debate, since it lets people argue that their winter was worse, so how could there be global warming? Clearly "global climate change" would have been a better name. But not all problems stem solely from poor word choices. Some stem from the intrinsically complex nature of much of modem science. Science sometimes transcends this limitation: remarkably, chemists were able to detail the precise chemical processes involved in the destruction of the ozone layer, making the evidence that chlorofluorocarbon gases (Freon, for example) were destroying the ozone layer indisputable.

H. A better understanding of the mathematical significance of results and less insistence on a simple story would help to clarify many scientific discussions. For several months, Harvard was tortured months. Harvard was tortured by empty debates over the relative intrinsic scientific abilities of men

and women. One of the more amusing aspects of the discussion was that those who believed in the differences and those who didn't used the same evidence about gender-specific special ability. How could that be? The answer is that the data shows no substantial effects. Social factors might account for these tiny differences, which in any case have an unclear connection to scientific ability. Not much of a headline when phrased that way, is it? Each type of science has its own source of complexity and potential for miscommunication. Yet there are steps we can take to improve public understanding in all cases. The first would be to inculcate greater understanding and acceptance of indirect scientific evidence. The information from an unmanned space mission is no less legitimate than the information from one in which people are on board.

I. This doesn't mean never questioning an interpretation, but it also doesn't mean equating indirect evidence with blind belief, as people sometimes suggest. Second, we might need different standards for evaluating science with urgent policy implications than research with purely theoretical value. When scientists say they are not certain about their predictions, it doesn't necessarily mean they've found nothing substantial. It would be better if scientists were more open about the mathematical significance of their results and if the public didn't treat math as quite so scary; statistics and errors, which tell us the uncertainty in a measurement, give us the tools to evaluate new developments fairly.

J. But most important, people have to recognize that science can be complex. If we accept only simple stories, the description will necessarily be distorted. When advances are subtle or complicated, scientists should be willing to go the extra distance to give proper explanations and patient about the truth. Even so, some difficulties are unavoidable. Most developments reflect work in progress, so the story is complex because no one yet knows the big picture.

Questions 27-31

Choose the correct letter, A, B, c or D.

Write your answers in boxes 27-31 on your answer sheet.

27 Why the faithful science communication Important?

A Science plays an increasingly significant role in people's lives.

B Science is fraught with challenges public are interested in.

C The nature of complexity in science communication leads to confusion.

D Scientific inventions are more important than ever before.

28 What is the reason that the author believe for the biggest challenges for science reporting

A phenomenon such as global warming, cancer research, diet studies are too complex

B Scientists themselves often only partly understand the ***Theory of Evolution***

C Scientists do not totally comprehend the meaning of certain scientific evolution

D Scientists themselves often partly understand the esoteric communication nature

29 According to the 3rd paragraph, the reference to the term and example of "theory of relativity" is to demonstrate

A theory of relativity is about an invariant physical phenomenon

B common people may be misled by the inaccurate choice of scientific phrase

C the term "relativity," is designed to be misleading public

D everything is relative and there is no absolutes existence

30 Which one Is a good example of appropriate word choice:

A Scientific theory for ***uncertainty principle***

B phenomenon of ***Global warming***

C the importance of ***ozone layer***

D ***Freon's*** destructive process on environmental

31 What Is surprising finding of the Harvard debates In the passage?

A There are equal intrinsic scientific abilities of men and women.

B The proof applied by both sides seemed to be of no big difference,

C The scientific data usually shows no substantial figures to support a debated idea.

D Social factors might have a clear connection to scientific ability.

***Questions* 32-35**

Do the following statements agree with the information given in Reading Passage 1?

In boxes 32-35 on your answer sheet, write

TRUE *if the statement is true*

FALSE *if the statement is false*

NOT GIVEN *if the information is not given in the passage*

32 "Global warming" scientifically refers to greater fluctuations in temperature and rainfall rather than a universal temperature rise.

33 More media coverage of "global warming" would help public to recognize the phenomenon.

34 Harvard debates should focus more on female scientist and male scientists

35 Public understanding and acceptance of indirect scientific evidence in all cases would lead to confusion

Questions 36-40

*Complete the following summary of the paragraphs of Reading Passage, using **no more than two** words from the Reading Passage for each answer. Write your answers in boxes **36-40** on your answer sheet.*

Science Communication is fraught with challenges that can easily distort discussions, leading to unnecessary confusion and misunderstandings. Firstly, Ambiguous 36.....are the source of some misunderstandings. Common people without proper training do not understand clearly or deeply a specific scientific meaning via the 37……scientists often employed. Besides, the measurements any 38.....makes can not be confined to describe in a(n) constant 39.....yet the phenomenon can be. What's more, even the word "theory" can be a problem. Theories aren't

necessarily shown to be correct or complete immediately since scientists often evolved better versions of specific theories, a good example can be the theory of 40 ..... Thus, most importantly people have to recognize that science can be complex.

Reading Test 16

Section 1

Can We Hold Back the Flood?

A. LAST winter's floods on the rivers of central Europe were among the worst since the Middle Ages, and as winter storms return, the spectre of floods is returning too. Just weeks ago, the river Rhone in south-east France burst its banks, driving 15,000 people from their homes, and worse could be on the way. Traditionally, river engineers have gone for Plan A: get rid of the water fast, draining it off the land and down to the sea in tall-sided rivers re-engineered as high-performance drains. But however big they dig city drains, however wide and straight they make the rivers, and however high they build the banks, the floods keep coming back to taunt them, from the Mississippi to the Danube. And when the floods come, they seem to be worse than ever.

B. No wonder engineers are turning to Plan B: sap the water's destructive strength by dispersing it into fields, forgotten lakes, flood plains and aquifers. Back in the days when rivers took a more tortuous path to the sea, flood waters lost impetus and volume while meandering across flood plains and idling through wetlands and inland deltas. But today the water tends to have an unimpeded journey to the sea. And this means that when it rams in the uplands, the water comes down all at once. Worse, whenever we close off more flood plain, the river’s flow farther downstream becomes more violent and uncontrollable. Dykes are only as good as their weakest link - and the water will unerringly find it.

C. Today, the river has lost 7 per cent of its original length and runs up to a th ứ d faster. When it rains hard in the Alps, the peak flows from several tributaries coincide in the main river, where once they arrived separately. And with four-fifths of the lower Rhine's flood plain barricaded off, the waters rise ever higher. The result is more frequent flooding that does ever-greater damage to the homes, offices and roads that sit on the flood plain. Much the same has happened in the US on the mighty Mississippi, which drains the world's second largest river catchment into the Gulf of Mexico.

D. The European Union is trying to improve rain forecasts and more accurately model how intense rains swell rivers. That may help cities prepare, but it won't stop the floods. To do that, say hydrologists, you need a new approach to engineering not just

Agency - country £1 billion - puts it like this: "The focus is now on working with the forces of nature. Towering concrete walls are out, and new wetlands are in." To help keep London's upstream and reflooding 10 square k outside Oxford. Nearer to London it has spent £100 million creating new wetlands and a relief channel across 16 kilometres.

E. The same is taking place on a much grander scale in Austria, in one of Europe's largest river restorations to date. Engineers are regenerating flood plains along 60 kilometres of the river Drava as it exits the Alps. They are also widening the river bed and channelling it back into abandoned meanders, oxbow lakes and backwaters overhung with willows. The engineers calculate that the restored flood plain can now store up to 10 million cubic metres of flood waters and slow storm surges coming out of the Alps by more than an hour, protecting towns as far downstream as Slovenia and Croatia.

F. "Rivers have to be allowed to take more space. They have to be turned from flood-chutes into flood-foilers," says Nienhuis. And the Dutch, for whom preventing floods is a matter of survival, have gone furthest. A nation built largely on drained marshes and seabed had the fright of its life in 1993 when the Rhine almost overwhelmed it. The same happened again in 1995, when a quarter of a million people were evacuated from the Netherlands. But a new breed of "soft engineers" wants our cities to become porous, and Berlin is theft governed by tough new rules to prevent its drains becoming overloaded after heavy rains. Harald Kraft, an architect working in the city, says: "We now see rainwater as giant Potsdamer Platz, a huge new commercial redevelopment by DaimlerChrysler in the heart of the city.

G. Los Angeles has spent billions of dollars digging huge drains and concreting river beds to carry away the water from occasional intense storms. "In LA we receive half the water we need in rainfall, and we throw it away. Then we spend hundreds of millions to import water," says Andy Lipkis, an LA environmentalist who kick-started the idea of the porous city by showing it could work on one house. Lipkis, along with citizens groups like Friends of the Los Angeles River and Unpaved LA, want to beat the urban flood hazard and fill the taps by holding onto the city's flood water. And it's not just a pipe dream. The authorities this year launched a $100 million scheme to road-test the porous city in one flood-hit community in Sun Valley. The plan is to catch the rain that falls on thousands of driveways, parking lots and rooftops in the valley. Trees will soak up water from parking lots. Homes and public buildings will capture roof water to irrigate gardens and parks. And road drains will empty into old gravel pits and other leaky places that should recharge the city's underground water reserves. Result: less flooding and more water for the city. Plan B says every city should be porous, every river should have room to flood naturally and every coastline should be left to build its own defences. It sounds expensive and utopian, until you realise how much we spend trying to drain cities and protect our watery margins - and how bad we are at it.

Questions 1-6

The reading Passage has seven paragraphs A-G. Which paragraph contains the following information? Write the correct letter A-G, in boxes 1-6 on your answer sheet

1 A new approach carried out in the UK

2 Reasons why twisty path and dykes failed

3 Illustration of an alternative Plan in LA which seems much unrealistic

4 Traditional way of tackling flood

5 Effort made in Netherlands and Germany

6 One project on a river benefits three nations

Questions 7-11

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 7-11 on your answer sheet.

Flood makes river shorter than it used to be, which means faster speed and more damage to constructions on flood plain. Not only European river poses such threat but the same things happens to the powerful____7_____in the US.

In Europe, one innovative approach carried out by UK's Environment Agency, for example a wetland instead of concrete walls is generated not far from the city of____8_____to protect it from flooding. In 1995, Rhine flooded again and thousands of people left the country of_____9_____. A league of engineers suggested that cities should be porous, _____10____set an good example for others. Another city devastated by heavy storms casually is _____11_____, though its government pours billions of dollars each year in order to solve the problem.

Questions 12-13

Choose TWO correct letter, write your answers in boxes 12-13 on your answer sheet

What TWO benefits will the new approach in the UK and Austria bring to US according to this passage?

A We can prepare before flood comes

B It may stop the flood involving the whole area

c Decrease strong rainfalls around Alps simply by engineering constructions

D Reserve water to protect downstream towns E Store tons of water in downstream area

Section 2

When the Tulip Bubble Burst

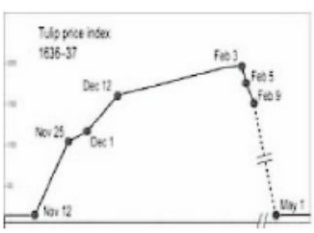
Tulips are spring-blooming perennials that grow from bulbs. Depending on the species, tulip plants can grow as short as 4 inches (10 cm) or as high as 28 inches (71 cm). The tulip's large flowers usually bloom on scapes or sub-scapose stems that lack bracts. Most tulips produce only one flower per stem, but a few species bear multiple flowers on their scapes (e.g. Tulipa turkestanica). The showy, generally cup or star-shaped tulip flower has three petals and three sepals, which are often termed tepals because they are nearly identical. These six tepals are often marked on the interior surface near the bases with darker colorings. Tulip flowers come in a wide variety of colors, except pure blue (several tulips with "blue" in the name have a faint violet hue)

A. Long before anyone ever heard of Qualcomm, CMGI, Cisco Systems, or the other high-tech stocks that have soared during the current bull market, there was Semper Augustus. Both more prosaic and more sublime than any stock or bond, it was a tulip of extraordinary beauty, its midnight-blue petals topped by a band of pure white and accented with crimson flares. To denizens of 17th century Holland, little was as desirable.

B. Around 1624, the Amsterdam man who owned the only dozen specimens was offered 3,000 guilders for one bulb. While there's no accurate way to render that in today's greenbacks, the sum was roughly equal to the annual income of a wealthy merchant. (A few years later, Rembrandt received about half that amount for painting The Night Watch.) Yet the bulb's owner, whose name is now lost to history, nixed the offer.

TulipMania C. Who was crazier, the tulip lover who refused to sell for a small fortune or the one who was willing to splurge. That's a question that springs to mind after reading Tulip mania: The Story of the World's Most Coveted Flower and the Extraordinary Passions It Aroused by British journalist Mike Dash. In recent years, as investors have intentionally forgotten everything they learned in Investing 101 in order to load up on unproved, unprofitable dot-com issues, tulip mania has been invoked frequently. In this concise, artfully written account, Dash tells the real history behind the buzzword and in doing so, offers a cautionary tale for our times.

D. The Dutch were not the first to go gaga over the tulip. Long before the first tulip bloomed in Europe-in Bavaria, it turns out, in 1559-the flower had enchanted the Persians and bewitched the rulers of the Ottoman Empire. It was in Holland, however, that the passion for tulips found its most fertile ground, for reasons that had little to do with horticulture.



E. Holland in the early 17th century was embarking on its Golden Age. Resources that had just a few years earlier gone toward fighting for independence from Spain now flowed into commerce. Amsterdam merchants were at the center of the lucrative East Indies trade, where a single voyage could yield profits of 400%. They displayed their success by erecting grand estates surrounded by flower gardens. The Dutch population seemed tom by two contradictory impulses: a horror of living beyond one's means and the love of a long shot.

F. Enter the tulip. "It is impossible to comprehend the tulip mania without understanding just how

different tulips were from every other flower known to horticulturists in the 17th century," says Dash. "The colors they exhibited were more intense and more concentrated than those of ordinary plants." Despite the outlandish prices commanded by rare bulbs, ordinary tulips were sold by the pound. Around 1630, however, a new type of tulip fancier appeared, lured by tales of fat profits. These "florists," or professional tulip traders, sought out flower lovers and speculators alike. But if the supply of tulip buyers grew quickly, the supply of bulbs did not. The tulip was a conspirator in the supply squeeze: It takes seven years to grow one from seed. And while bulbs can produce two or three clones, or "offsets," annually, the mother bulb only lasts a few years.

G. Bulb prices rose steadily throughout the 1630s, as ever more speculators into the market. Weavers and farmers mortgaged whatever they could to raise cash to begin trading. In 1633, a farmhouse in Hoorn changed hands for three rare bulbs. By 1636 any tulip-even bulbs recently considered garbage-could be sold off, often for hundreds of guilders. A futures market for bulbs existed, and tulip traders could be found conducting their business in hundreds of Dutch taverns. Tulip mania reached its peak during the winter of 1636-37, when some bulbs were changing hands ten times in a day. The zenith came early that winter, at an auction to benefit seven orphans whose only asset was 70 fine tulips left by then father. One, a rare Violetten Admirael van Enkhuizen bulb that was about to split in two, sold for 5,200 guilders, the all-time record. All told, the flowers brought in nearly 53,000 guilders.

H. Soon after, the tulip market crashed utterly, spectacularly. It began in Haarlem, at a routine bulb auction when, for the first time, the greater fool refused to show up and pay. Within days, the panic had spread across the country. Despite the efforts of traders to prop up demand, the market for tulips evaporated. Flowers that had commanded 5,000 guilders a few weeks before now fetched one-hundredth that amount. Tulip mania is not without flaws. Dash dwells too long on the tulip's migration from Asia to Holland. But he does a service with this illuminating, accessible account of incredible financial folly.

I. Tulip mania differed in one crucial aspect from the dot-com craze that grips our attention today: Even at its height, the Amsterdam Stock Exchange, well-established in 1630, wouldn't touch tulips. "The speculation in tulip bulbs always existed at the margins of Dutch economic life," Dash writes. After the market crashed, a compromise was brokered that let most traders settle then debts for a fraction of then liability. The overall fallout on the Dutch economy was negligible. Will we say the same when Wall Street's current obsession finally runs its course?

Questions 14-18

The reading Passage has seven paragraphs A-I.

Which paragraph contains the following information?

Write the correct letter A-I, in boxes 14-18 on your answer sheet.

14 Difference between bubble burst impacts by tulip and by *high-tech* shares

15 Spread of tulip before 17th century

16 Indication of money offered for rare bulb in 17th century

17 Tulip was treated as money in Holland

18 Comparison made between tulip and other plants

Questions 19-23

Do the following statements agree with the information given in Reading Passage 2? In boxes 19-23 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

19 In 1624, all the tulip collection belonged to a man in Amsterdam.

20 Tulip was first planted in Holland according to this passage.

21 Popularity of Tulip in Holland was much higher than any other countries in 17th century.

22 Holland was the most wealthy country in the world in 17th century.

23 From 1630, Amsterdam Stock Exchange started to regulate Tulips exchange market.

Questions 24-27

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 24-27 on your answer sheet.

Dutch concentrated on gaining independence by ____24____ against Spain in the early 17th century; consequently spare resources entered the area of _____25_____. Prosperous traders demonstrated their status by building great _____26____ and with gardens in surroundings. Attracted by the success of profit on tulip, traders kept looking for_____27_____and speculator for sale.

Section 3

Robert Cialdini

The Secrets of Persuasion

A. Our mother may have told you the secret to getting what you ask for was to say please. The reality is rather more surprising. Adam Dudding talks to a psychologist who has made a life's work from the science of persuasion. Some scientists peer at things through high-powered microscopes. Others goad rats through mazes, or mix bubbling fluids in glass beakers. Robert Cialdini, for his part, does curious things with towels, and believes that by doing so he is discovering important insights into how society works.

B. Cialdini's towel experiments (more of them later), are part of his research into how we persuade others to say yes. He wants to know why some people have a knack for bending the will of others, be

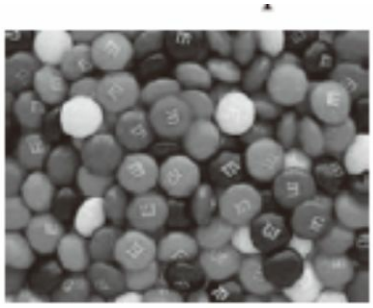
it a telephone cold-caller talking to you about timeshares, or a parent whose children are compliant even without threats of extreme violence. While he's anxious not to be seen as the man who's written the bible for snake-oil salesmen, for decades the Arizona State University social psychology professor has been creating systems for the principles and methods of persuasion, and writing bestsellers about them. Some people seem to be born with the skills; Cialdini's claim is that by applying a little science, even those of US who aren't should be able to get our own way more often. "All my life I've been an easy mark for the blandishment of salespeople and fundraisers and I'd always wondered why they could get me to buy things I didn't want and give to causes I hadn't heard of," says Cialdini on the phone from London, where he is plugging his latest book.

C. He found that laboratory experiments on the psychology of persuasion were telling only part of the story, so he began to research influence in the real world, enrolling in sales-training programmes: "I learn how to sell automobiles from a lot, how to sell insurance from an office, how to sell encyclopedias door to door." He concluded there were six general "principles of influence" and has since put them to the test under slightly more scientific conditions. Most recently, that has meant messing about with towels. Many hotels leave a little card in each bathroom asking guests to reuse towels and thus conserve water and electricity and reduce pollution. Cialdini and his colleagues wanted to test the relative effectiveness of different words on those cards. Would guests be motivated to co-operate simply because it would help save the planet, or were other factors more compelling? To test this, the researchers changed the card's message from an environmental one to the simple (and truthful) statement that the majority of guests at the hotel had reused their towel at least once. Guests given this message were 26% more likely to reuse their towels than those given the old message. In Cialdini's book ***"Yes! 50 Secrets from the Science of Persuasion",*** co-written with another social scientist and a business consultant, he explains that guests were responding to the persuasive force of "social proof', the idea that our decisions are strongly influenced by what we believe other people like US are doing.

D. So much for towels. Cialdini has also learnt a lot from confectionery. Yes! cites the work of New Jersey behavioural scientist David Strohmetz, who wanted to see how restaurant patrons would respond to a ridiculously small favour from their food server, in the form of an after-dinner chocolate for each diner. The secret, it seems, is in how you give the chocolate. When the chocolates arrived in a heap with the bill, tips went up a miserly 3% compared to when no chocolate was given. But when the chocolates were dropped individually in front of each diner, tips went up 14%. The scientific breakthrough, though, came when the waitress gave each diner

one chocolate, headed away from the table then doubled back to give them one more each, as if such generosity had only just occurred to her. Tips went up 23%. This is "reciprocity" in action: we want to return favours done to US, often without bothering to calculate the relative value of what is being received and given.

E. Geeling Ng, operations manager at Auckland's Soul Bar, says she's never heard of Kiwi waiting staff using such a cynical trick, not least because New Zealand tipping culture is so different from that of the US: "If you did that in New Zealand, as diners were leaving they'd say 'can we have some more?" ' But she certainly understands the general principle of reciprocity. The way to a diner's heart is "to give them something they're not expecting in the way of service. It might be something as small as leaving a mint on their plate, or it might be remembering that last time they were in they wanted their water with no ice and no lemon. "In America it would translate into an instant tip. In New Zealand it translates into a huge smile and thank you." And no doubt, return visits.



THE FIVE PRINCIPLES OF PERSUASION

F. Reciprocity: People want to give back to those who have given to them. The trick here is to get in first. That's why charities put a crummy pen inside a mailout, and why smiling women in supermarkets hand out dollops of free food. Scarcity: People want more of things they can have less of. Advertisers ruthlessly exploit scarcity ("limit four per customer", "sale must end soon"), and Cialdini suggests parents do too: "Kids want things that are less available, so say 'this is an unusual opportunity; you can only have this for a certain time'."

G. Authority: We trust people who know what they're talking about. So inform people honestly of your credentials before you set out to influence them. "You'd be surprised how many people fail to do that," says Cialdini. "They feel it's impolite to talk about then expertise." In one study, therapists whose patients wouldn't do then exercises were advised to display then qualification certificates prominently. They did, and experienced an immediate leap in patient compliance.

H. Commitment/consistency: We want to act in a way that is consistent with the commitments we have already made. Exploit this to get a higher sign-up rate when soliciting charitable donations. Ffrst ask workmates if they think they will sponsor you on your egg-and-spoon marathon. Later, return with the sponsorship form to those who said yes and remind them of their earlier commitment/

I. Liking: We say yes more often to people we like. Obvious enough, but reasons for "liking" can be weird. In one study, people were sent survey forms and asked to return them to a named researcher. When the researcher gave a fake name resembling that of the subject (eg, Cynthia Johnson is sent a survey by "Cindy Johansen"), surveys were twice as likely to be completed. We favour people who resemble US, even if the resemblance is as minor as the sound of their name.

J. Social proof: We decide what to do by looking around to see what others just like US are doing. Useful for parents, says Cialdini. "Find groups of children who are behaving in a way that you would like your child to, because the child looks to the side, rather than at you." More perniciously, social

proof is the force underpinning the competitive materialism of "keeping up with the Joneses"

Questions 28-31

*Choose the correct letter. **A,** B, **c** or D.*

Write your answers in boxes 37-40 on your answer sheet.

28. The main purpose of *Ciadini*'s research of writing is to

A. explain the reason way researcher should investigate in person

B. explore the secret that why some people become the famous sales person

C. help people to sale products

D. prove maybe there is a science in the psychology of persuasion

29. Which of statement is CORRECT according to *Ciadini's* research methodology

A. he checked data in a lot of latest books

B. he conducted this experiment in laboratory

C. he interviewed and contact with many sales people

D. he made lot phone calls collecting what he wants to know

30. Which of the followings is CORRECT according to towel experiment in the passage?

A. Different hotel guests act in a different response

B. Most guests act by idea of environment preservation

C. more customers tend to cooperate as the message requires than simply act environmentally

D. people tend to follow the hotel's original message more

31. Which of the followings is CORRECT according to the candy shop experiment in the passage?

A. Presenting way affects diner's tips

B. Regular customer gives tips more than irregulars

C. People give tips only when offered chocolate

D. Chocolate with bill got higher tips

Questions 32-35

Do the following statements agree with the information given in Reading Passage 3? In boxes 32-35 on your answer sheet, write

TRUE	*if the Statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

/

32 Robert Cialdini experienced "principles of influence" himself in realistic life.

33 Principle of persuasion has different types in different countries.

34 In New Zealand, people tend to give tips to attendants after being served a chocolate.

35 Elder generation of New Zealand is easily attracted by extra service of restaurants by principle of reciprocity.

Questions 36-40

Use the information in the passage to match the category (listed A-E) with correct description below. Write the appropriate letters A-E in boxes 32-37 on answer sheet.

NB You may use any letter more than once.

A. Reciprocity of scarcity

B. Authority

C. previous comment

D. Liking

---

36 Some expert may reveal qualification in front of clients.

37 Parents tend to say something that other kids are doing the same.

38 Advertisers ruthlessly exploit the limitation of chances

39 Use a familiar name in a survey.

40 Ask colleagues to offer a helping hand

Reading Test 17

Section 1

MENTAL GYMNASTICS

A. THE working day has just started at the head office of Barclays Bank in London. Seventeen staff are helping themselves to a buffet breakfast as young psychologist Sebastian Bailey enters the room to begin the morning's framing session. But this is no ordinary training session. He's not here to sharpen their finance or management skills. He's here to exercise their brains.

B. Today's workout, organised by a company called the Mind Gym in London, is entitled "having presence". What follows is an intense 90-minute session in which this rather abstract concept is gradually broken down into a concrete set of feelings, mental tricks and behaviours. At one point the bankers are instructed to shut then eyes and visualise themselves filling the room and then the building. They finish up by walking around the room acting out various levels of presence, from low-key to over the top.

C. It's easy to poke fun. Yet similar mental workouts are happening in corporate seminar rooms around the globe. The Mind Gym alone offers some 70 different sessions, including ones on mental stamina, creativity for logical thinkers and "zoom learning". Other outfits draw more directly on the exercise analogy, offering "neurobics" courses with names like "brain sets" and "cerebral fitness". Then there are books with titles like Pumping Ions, full of brainteasers that claim to "flex your mind", and software packages offering memory and spatial-awareness games.

D. But whatever the style, the companies' sales pitch is invariably the same—follow our routines to shape and sculpt your brain or mind, just as you might tone and train your body. And, of course, they nearly all claim that their mental workouts draw on serious scientific research and thinking into how the brain works.

E. One outfit, Brainergy of Cambridge, Massachusetts (motto: "Because your grey matter matters") puts it like this: "Studies have shown that mental exercise can cause changes in brain anatomy and brain chemistry which promote increased mental efficiency and clarity. The neuroscience is cutting-edge." And on its website, Mind Gym trades on a quote from Susan Greenfield, one of Britain's best known neuroscientists: "It's a bit like going to the gym, if you exercise your brain it will grow."

F. Indeed, die Mind Gym originally planned to hold its sessions in a local health club, until its founders realised where the real money was to be made. Modem companies need flexible, bright thinkers and will seize on anything that claims to create them, especially if it looks like a quick fix backed by science. But are neurobic workouts really backed by science? And do we need them?

G. Nor is there anything remotely high-tech about what Lawrence Katz, co-author of Keep Your Brain Alive, recommends. Katz, a neurobiologist at Duke University Medical School in North Carolina, argues that just as many of US fail to get enough physical exercise, so we also lack sufficient mental

stimulation to keep our brain in trim. Sine we are busy with jobs, family and housework. But most of this activity is repetitive routine. And any leisure time is spent slumped in front of the TV.

H. So, read a book upside down. Write or brush your teeth with your wrong hand. Feel your way around the room with your eyes shut. Sniff vanilla essence while listening intently to orchestral music. Anything, says Katz, to break your normal mental routine. It will help invigorate your brain, encouraging its cells to make new connections and pump out neuroteophins, substances that feed and sustain brain circuits.

I. Well, up to a point it will. "What I'm really talking about is brain maintenance rather than bulking up your IQ," Katz adds. Neurobics, in other words, is about letting your brain fulfill its potential. It cannot create super-brains. Can it achieve even that much, though? Certainly the brain is an organ that can adapt to the demands placed on it. Tests on animal brain tissue, for example, have repeatedly shown that electrically stimulating the synapses that connect nerve cells thought to be crucial to learning and reasoning, makes them stronger and more responsive. Brain scans suggest we use a lot more of our grey matter when carrying out new or strange tasks than when we're doing well-rehearsed ones. Rats raised in bright cages with toys sprout more neural connections than rats raised in bare cages— suggesting perhaps that novelty and variety could be crucial to a developing brain. Katz, And neurologists have proved time and again that people who lose brain cells suddenly during a stroke often sprout new connections to compensate for the loss—especially if they undergo extensive therapy to overcome any paralysis.

J. Guy Claxton, an educational psychologist at the University of Bristol, dismisses most of the neurological approaches as "neuro-babble". Nevertheless, there are specific mental skills we can learn, he contends. Desirable attributes such as creativity, mental flexibility, and even motivation, are not the fixed faculties that most of US think. They are thought habits that can be learned. The problem, says Claxton, is that most of US never get proper training in these skills. We develop our own private set of mental strategies for tackling tasks and never learn anything explicitly. Worse still, because any learned skill— even driving a car or brushing our teeth-quickly sinks out of consciousness, we can no longer see the very thought habits we're relying upon. Our mental tools become invisible to US.

K. Claxton is the academic adviser to the Mind Gym. So not surprisingly, the company espouses his solution-that we must return our thought patterns to a conscious level, becoming aware of the details of how we usually think. Only then can we start to practise better thought patterns, until eventually these become our new habits. Switching metaphors, picture not gym classes, but tennis or football coaching.

L. In practice, the training can seem quite mundane. For example, in one of the eight different creativity workouts offered by the Mind Gym—entitled "creativity for logical thinkers" one of the mental strategies taught is to make a sensible suggestion, then immediately pose its opposite. So, asked to spend five minutes inventing a new pizza, a group soon comes up with no topping, sweet topping, cold topping, price based on time of day, flat-rate prices and so on.

M. Bailey agrees that the trick is simple. But it is surprising how few such tricks people have to call upon when they are suddenly asked to be creative: "They tend to just label themselves as uncreative, not realising that there are techniques that every creative person employs." Bailey says the aim is to introduce people to half a dozen or so such strategies in a session so that what at first seems like a dauntingly abstract mental task becomes a set of concrete, learnable behaviours. He admits this is not a short cut to genius. Neurologically, some people do start with quicker circuits or greater handling

capacity. However, with the right kind of training he thinks we can dramatically increase how efficiently we use it.

N. It is hard to prove that the training itself is effective. How do you measure a change in an employee's creativity levels, or memory skills? But staff certainly report feeling that such classes have opened their eyes. So, neurological boosting or psychological training? At the moment you can pay your money and take your choice. Claxton for one believes there is no reason why schools and universities shouldn't spend more time teaching basic thinking skills, rather than trying to stuff heads with facts and hoping that effective thought habits are somehow absorbed by osmosis.

Questions 1-5

Do the following statements agree with the information given in Reading Passage 1 In boxes 1-5 on your answer sheet, write

YES	*if the statement is true*
NO	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

1 Mind Gym coach instructed employees to imagine that they are the building.

2 Mind Gym uses the similar marketing theory that is used all round

3 Susan Greenfield is the founder of Mind Gym.

4 All business and industries are using Mind Gym's session globally.

5 According to Mind Gym, extensive scientific background supports their mental training sessions.

Questions 6-13

Use the information in the passage to match the people (listed A-D) with opinions or deeds below. Write the appropriate letters A-D in boxes 6-13 on your answer sheet.

A. Guy Claxton

B. Sebastian Bailey

C. Susan Greenfield

D. Lawrence Katz

NB: You may use any letter more than once

6 We do not have enough inspiration to keep our brain fit.

7 The more you exercise your brain like exercise in the gym, the more brain will grow.

8 Exercise can keep your brain health instead of improving someone's IQ.

9 It is valuable for schools to teach students about creative skills besides basic known knowledge.

10 We can develop new neuron connections when we lose old connections via certain treatment.

11 People usually mark themselves as not creative before figuring out there are approaches for each person.

12 An instructor in Mind Gym who guided the employees to exercise.

13 Majority of people don't have appropriate skills-training for brain.

Section 2

Finding Our Way

A. "Drive 200 yards, and then turn right," says the car's computer voice. You relax in the driver's seat, follow the directions and reach your destination without error. It's certainly nice to have the Global Positioning System (GPS) to direct you to within a few yards of your goal. Yet if the satellite service's digital maps become even slightly outdated, you can become lost. Then you have to rely on the ancient human skill of navigating in three-dimensional space. Luckily, your biological finder has an important advantage over GPS: it does not go awry if only one part of the guidance system goes wrong, because it works in various ways. You can ask questions of people on the sidewalk. Or follow a street that looks familiar. Or rely on a navigational rubric: "If I keep the East River on my left, I will eventually cross 34th Street." The human positioning system is flexible and capable of learning. Anyone who knows the way from point A to point B—and from A to C—can probably figure out how to get from B to c, too.

B. But how does this complex cognitive system really work? Researchers are looking at several strategies people use to orient themselves in space: guidance, path integration and route following. We may use all three or combinations thereof. And as experts learn more about these navigational skills, they are making the case that our abilities may underlie our powers of memory and logical thinking. Grand Central, Please Imagine that you have arrived in a place you have never visited-New York City. You get off the train at Grand Central Terminal in midtown Manhattan. You have a few hours to explore before you must return for your ride home. You head uptown to see popular spots you have been told about: Rockefeller Center, Central Park, the Metropolitan Museum of Art. You meander in and out of shops along the way. Suddenly, it is time to get back to the station. But how?

C. If you ask passersby for help, most likely you will receive information in many different forms. A person who orients herself by a prominent landmark would gesture southward: "Look down there. See the tall, broad MetLife Building? Head for that "the station is right below it." Neurologists call this navigational approach "guidance," meaning that a landmark visible from a distance serves as the marker for one's destination.

D. Another city dweller might say: "What places do you remember passing? ... Okay. Go toward the end of Central Park, then walk down to St. Patrick's Cathedral. A few more blocks, and Grand

Central will be off to your left." In this case, you are pointed toward the most recent place you recall,

and you aim for it. Once there you head for the next notable place and so on, retracing your path. Your brain is adding together the individual legs of your trek into a cumulative progress report. Researchers call this strategy "path integration." Many animals rely primarily on path integration to get around, including insects, spiders, crabs and rodents. The desert ants of the genus Cataglyphis employ this method to return from foraging as far as 100 yards away. They note the general direction they came from and retrace then steps, using the polarization of sunlight to orient themselves even under overcast skies. On their way back they are faithful to this inner homing vector. Even when a scientist picks up an ant and puts it in a totally different spot, the insect stubbornly proceeds in the originally determined direction until it has gone "back" all of the distance it wandered from its nest. Only then does the ant realize it has not succeeded, and it begins to walk in successively larger loops to find its way home.

E. Whether it is trying to get back to the anthill or the train station, any animal using path integration must keep track of its own movements so it knows, while returning, which segments it has already completed. As you move, your brain gathers data from your environment—sights, sounds, smells, lighting, muscle contractions, a sense of time passing—to determine which way your body has gone. The church spire, the sizzling sausages on that vendor's grill, the open courtyard, and the train station —all represent snapshots of memorable junctures during your journey.

F. In addition to guidance and path integration, we use a third method for finding our way. An office worker you approach for help on a Manhattan street comer might say: "Walk straight down Fifth, turn left on 47th, turn right on Park, go through the walkway under the Helmsley Building, then cross the street to the MetLife Building into Grand Central." This strategy, called route following, uses landmarks such as buildings and street names, plus directions-straight, turn, go through—for reaching intermediate points. Route following is more precise than guidance or path integration, but if you forget the details and take a wrong turn, the only way to recover is to backtrack until you reach a familiar spot, because you do not know the general direction or have a reference landmark for your goal. The route-following navigation strategy truly challenges the brain. We have to keep all the landmarks and intermediate directions in our head. It is the most detailed and therefore most reliable method, but it can be undone by routine memory lapses. With path integration, our cognitive memory is less burdened; it has to deal with only a few general instructions and the homing vector. Path integration works because it relies most fundamentally on our knowledge of our body's general direction of movement, and we always have access to these inputs. Nevertheless, people often choose to give route-following directions, in part because saying "Go straight that way!" just does not work in our complex, man-made surroundings.

G. Road Map or Metaphor? On your next visit to Manhattan you will rely on your memory to get around. Most likely you will use guidance, path integration and route following in various combinations. But how exactly do these constructs deliver concrete directions? Do we humans have, as an image of the real world, a kind of road map in our heads—with symbols for cities, train stations and churches; thick lines for highways; narrow lines for local streets? Neurobiologists and cognitive psychologists do call the portion of our memory that controls navigation a "cognitive map." The map metaphor is obviously seductive: maps are the easiest way to present geographic information for convenient visual inspection. In many cultures, maps were developed before writing, and today they are used in almost every society. It is even possible that maps derive from a universal way in which our spatial-memory networks are wired.

H. Yet the notion of a literal map in our heads may be misleading; a growing body of research implies that the cognitive map is mostly a metaphor. It may be more like a hierarchical structure of relationships. To get back to Grand Central, you first envision the large scale-that is, you visualize the general direction of the station. Within that system you then imagine the route to the last place you remember. After that, you observe your nearby surroundings to pick out a recognizable storefront or street comer that will send you toward that place. In this hierarchical, or nested, scheme, positions and distances are relative, in contrast with a road map, where the same information is shown in a geometrically precise scale.

Questions 14-18

Use the information in the passage to match the category of each navigation method (listed A-C) with correct statement. Write the appropriate letters A-C in boxes 14-18 on your answer sheet.

NB you may use any letter more than once

A. Guidance

B. Path integration,

C. **Route following**

---

14 Using basic direction from starting point and light intensity to move on.

15 Using combination of place and direction heading for destination.

16 Using an iconic building near your destination as orientation.

17 Using a retrace method from a known place if a mistake happens.

18 Using a passed spot as reference for a new integration.

Questions 19-21

*Choose the correct letter, A, B, **c** or D.*

Write your answers in boxes 19-21 on your answer sheet.

19. What does the ant of ***Cataglyphis*** respond if it has been taken to another location according to the passage?

A. Changes the orientation sensors improvingly

B. Releases biological scent for help from others

C. Continues to move by the original orientation

D. Totally gets lost once disturbed

20. Which of the followings is true about "cognitive map" in this passage?

A. There is not obvious difference contrast by real map

B. It exists in our head and is always correct

C. It only exists under some cultures

D. It was managed by brain memory

21. Which of following description of way findings correctly reflects the function of ***cognitive map*****?**

A. It visualises a virtual route in a large scope

B. It reproduces an exact details of every landmark

C. Observation plays a more important role

D. Store or supermarket is a must in file map

Questions 22-26

Do the following statements agree with the information given in Reading Passage 2? In boxes 22-26 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement* **is** *false*
NOT GIVEN	*if the information is not given in the passage*

22 Biological navigation has a state of flexibility.

23 You will always receive good reaction when you ask direction.

24 When someone follows a route, he or she collects comprehensive perceptional information in mind on the way.

25 Path integration requires more thought from brain compared with route-following.

26 In a familiar surrounding, an exact map of where you are will automatically emerge in your head.

Section 3

Mystery in Easter

A. One of the world's most famous yet least visited archaeological sites, Easter Island is a small, hilly, now treeless island of volcanic origin. Located in the Pacific Ocean at 27 degrees south of the equator and some 2200 miles (3600 kilometers) off the coast of Chile, it is considered to be the world's most remote inhabited island. The island is, technically speaking, a single massive volcano rising over ten thousand feet from the Pacific Ocean floor. The island received its most well-known current name, Easter Island, from the Dutch sea captain Jacob Roggeveen who became the first European to visit Easter Sunday, April 5,1722.

B. In the early 1950s, the Norwegian explorer Thor Heyerdahl popularized the idea that the island had been originally settled by advanced societies of Indians from the coast of South America. Extensive archaeological, ethnographic and linguistic research has conclusively shown this hypothesis to be inaccurate. It is now recognized that the original inhabitants of Easter Island are of Polynesian stock (DNA extracts from skeletons have confirmed this**,** that they most probably came from the Marquesas or Society islands, and that they arrived as early as 318 AD (carbon dating of reeds from a grave confirms this). At the time of their arrival, much of the island was forested, was teeming with land birds, and was perhaps the most productive breeding site for seabirds in the Polynesia region. Because of the plentiful bird, fish and plant ' food sources, the human population grew and gave rise to a rich religious and artistic culture.

C. That culture's most famous features are its enormous stone statues called moai, at least 288 of which once stood upon massive stone platforms called ***ahu.*** There are some 250 of these ***ahu*** platforms spaced approximately one half mile apart and creating an almost unbroken line around the perimeter of the island. Another 600 moai statues, in various stages of completion, are scattered around the island, either in quarries or along ancient roads between the quarries and the coastal areas where the statues were most often erected. Nearly all the moai are carved from the tough stone of the ***Rano Raraku*** volcano. The average statue is 14 feet and 6 inches tall and weighs 14 tons. Some moai were as large as 33 feet and weighed more than 80 tons. Depending upon the size of the statues, it has been estimated that between 50 and 150 people were needed to drag them across the countryside on sleds and rollers made from the island's trees.

D. Scholars are unable to definitively explain the function and use of the moai statues. It is

assumed that their carving and erection derived from an idea rooted in similar practices found elsewhere in Polynesia but which evolved in a unique way on Easter Island. Archaeological and iconographic analysis indicates that the statue cult was based on an ideology of male, lineage-based authority incorporating anthropomorphic symbolism. The statues were thus symbols of authority and power, both religious and political. But they were not only symbols. To the people who erected and used them, they were actual repositories of sacred spirit. Carved stone and wooden objects in ancient Polynesian religions, when properly fashioned and ritually prepared, were believed to be charged by a magical spiritual essence called ***mana.*** The ahu platforms of Easter Island were the sanctuaries of the people, and the moai statues were the ritually charged sacred objects of those sanctuaries.

E. Besides its more well-known name, Easter Island is also known as ***Te-Pito-O-Te-Henua***, meaning 'The Navel of the World', and as ***Mata-Ki-Te-Rani,*** meaning ' Eyes Looking at Heaven '. These ancient name and a host of mythological details ignored by mainstream archaeologists, point to the possibility that the remote island may once have been a geodetic marker and the site of an astronomical observatory of a long forgotten civilization. In his book. Heaven's Mirror, Graham Hancock suggests that Easter Island may once have been a significant scientific outpost of this antediluvian civilization and that its location had extreme importance in a planet-spanning, mathematically precise grid of sacred sites. Two other alternative scholars, Christopher Knight and Robert Lomas, have extensively studied the location and possible function of these geodetic markers. In their fascinating book, Uriel's Machine, they suggest that one purpose of the geodetic markers was as part of global network of sophisticated astronomical observatories dedicated to predicting and preparing for future commentary impacts and crystal displacement cataclysms.

F. In the latter years of the 20th century and the first years of the 21st century various writers and scientists have advanced theories regarding the rapid decline of Easter Island's magnificent civilization around the time of the first European contact. Principal among these theories, and now shown to be inaccurate, is that postulated by Jared Diamond in his book ***Collapse: How Societies Choose to or Survive.*** Basically these theories state that a few centuries after Easter Island's initial colonization the resource needs of the growing population had begun to outpace the island's capacity to renew itself ecologically. By the 1400s the forests had been entirely cut, the rich ground cover had eroded away, the springs had dried up, and the vast flocks of birds coming to roost on the island had disappeared. With no logs to build canoes for offshore fishing, with depleted bird and wildlife food sources, and with declining crop yields because of the erosion of good soil, the nutritional intake of the people plummeted. First famine, then cannibalism, set in. Because the island could no longer feed the chiefs, bureaucrats and priests who kept the complex society running, the resulting chaos triggered a social and cultural collapse. By 1700 the population dropped to between one-quarter and one-tenth of its former number, and many of the statues were toppled during supposed "clan wars " of the 1600 and 1700s.

G. The faulty notions presented in these theories began with the racist assumptions of Thor Heyerdahl and have been perpetuated by writers, such as Jared Diamond, who do not have sufficient archaeological and historical understanding of the actual events which occurred on Easter Island. The real truth regarding the tremendous social devastation which occurred on Easter Island is that it was a direct consequence of the inhumane behavior of many of the first European visitors, particularly the slavers who raped and murdered the islanders, introduced small pox and other diseases, and brutally removed the natives to mainland South America.

You should spend about 20 minutes on Questions 27-40 which are based on Reading Passage 3 below.

The reading passage has seven paragraphs, A-G

Choose the correct heading for paragraphs A-G from the list below.

Write the correct number, i-xi, in boxes 27-31 on your answer sheet.

NB *There are more headings than paragraphs, so you will not use them*

List of Headings

i The famous moai

ii The status represented symbols of combined purposes

iii The ancient spots which indicates scientific application

iv The story of the name

v Early immigrants, rise and prosperity

vi The geology of Easter Island

vii The begin of Thor Heyerdahl's discovery

viii The countering explaination to the misconceptions politaically manipulated

ix Symbols of authority and power

x The Navel of the World

xi The norweigian Invaders' legacy

Questions 27-3

Example Answer

Paragraph A ***iv***

27 Paragraph B

28 Paragraph D

29 Paragraph E

30 Paragraph G

Questions 31-36

Do the following statements agree with the information given in Reading Passage 3? In boxes 31 -36on your answer sheet write

TRUE *if the statement is true*

FALSE *if the statement is false*

NOT GIVEN *if the information is not given in the passage*

31 The first inhabitants of Easter Island are Polynesian, from the Marquesas or Society islands.

32 Construction of some moai statues on the island was not finished.

33 The Moai can be found not only on Easter Island but also elsewhere in Polynesia.

34 Most archeologists recognised the religious and astronomical functions for an ancient society

35 The structures on Easter Island work as an astronomical outpost for extraterrestrial visitors.

36 the theory that depleted natural resources leading to the fail of Easter Island actual has a distorted perspective

Questions 37-40

Complete the following summary of the paragraphs of Reading Passage, using ***NO MORE THAN THREE WORDS*** *from the Reading Passage for each answer. Write your answers in boxes 37-40 on your answer sheet.*

Many theories speculated that Easter Island's fall around the era of the initial European contact. Some say the resources are depleted by a 37.....; The erroneous theories began with a root of the 38..... advanced by some scholars. Early writers did not have adequate 39..... understandings to comprehend the true result of 40…….nature of events on the island. The social devastation was in fact a direct of the first European settlers.

Reading Test 18

Section 1

The Mozart Effect

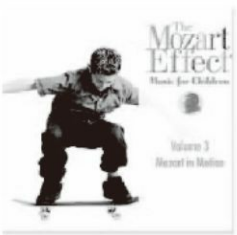
A. Music has been used for centuries to heal the body. In the ***Ebers Papyrs*** (one of the earliest medical documents, circa 1500 B.C.), it was recorded that physicians chanted to heal the sick (Castleman, 1994). In various cultures, we have observed singing as part of healing rituals. In the world of Western medicine, however, using music in medicine lost popularity until the introduction of the radio. Researchers then started to notice that listening to music could have significant physical effects. Therapists noticed music could help calm anxiety and researchers saw that listening to music could cause a drop in blood pressure. In addition to these two areas, music has been used with cancer chemotherapy to reduce nausea, during surgery to reduce stress hormone production, during childbirth, and in stroke recovery (Castleman, 1994 and Westley, 1998). It has been shown to decrease pain as well as enhance the effectiveness of the immune system. In Japan, compilations of music are used as medication, of sorts. For example, if you want to cure a headache or migraine, the album suggested Mendelssohn's "Spring Song," Dvorak's "Humoresque," or part of George Gershwin's "An American in Paris" (Campbell, 1998). Music is also being used to assist in learning, in a phenomenon called the Mozart Effect.

B. Frances H. Rauscher, Ph.D., first demonstrated the correlation between music and learning in an experiment in 1993. His experiments indicated that a 10 minute dose of Mozart could temporarily boost intelligence. Groups of students were given intelligence tests after listening to silence, relaxation tapes, or Mozart's Sonata for Two Pianos in D Major for a short time. He found that after silence, the average IQ score was 110, and after the relaxation tape, scores rose a point. After listening to Mozart, however, the scores jumped to 119 (Westley, 1998). Even students who did not like the music still had an increased score on the IQ test. Rauscher hypothesized that "listening to complex, non-repetitive music, like Mozart, may simulate neural pathways that are important in thinking" (Castleman, 1994).

C. The same experiment was repeated on rats by Rauscher and Hong Hua Li from Stanford. Rats also demonstrated enhancement in their intelligence performance. These new studies indicate that rats that were exposed to Mozart showed "increased gene expression of BDNF (a neural growth factor), CREB (a learning and memory compound), and Synapsin I(a synaptic growth protein)" in the brain's hippocampus, compared with rats in the control group, which heard only white noise (e.g. the whooshing sound of a radio tuned between stations)

D. How exactly does the Mozart affect work? Researchers are still trying to determine

the actual mechanisms for the formation of these enhanced learning pathways. Neuroscientists suspect that music can actually help build and strengthen connections between neurons in the cerebral cortex in a process similar to what occurs in brain development despite its type. When a baby is born, certain connections have already been made - like connections for heartbeat and breathing. As new information is learned and motor skills develop, new neural connections are formed. Neurons that are not used will eventually die while those used repeatedly will form strong connections. Although a large number of these neural connections require experience, they also must occur within a certain time frame. For example, a child born with cataracts cannot develop connections within the visual cortex. If the cataracts are removed by surgery right away, the child's vision develops normally. However, after the age of 2, if the cataracts are removed, the child will remain blind because those pathways cannot establish themselves.



E. Music seems to work in the same way. In October of 1997, researchers at the University of Konstanz in Germany found that music actually rewires neural circuits (Begley, 1996). Although some of these circuits are formed for physical skills needed to play an instrument, just listening to music strengthens connection used in higher-order thinking. Listening to music can then be thought of as "exercise" for the brain, improving concentration and enhancing intuition.

F. If you're a little skeptical about the claims made by supporters of the Mozart Effect, you're not alone. Many people accredit the advanced learning of some children who take music lessons to other personality traits, such as motivation and persistence, which is required in all types of learning. There have also been claims of that influencing the results of some experiments.

G. Furthermore, many people are critical of the role the media had in turning an isolated study into a trend for parents and music educators. After Mozart Effect was published to the public, the sales of Mozart CDs stayed on the top of the hit list for three weeks. In an article by Michael Linton, he wrote that the research that began this phenomenon (the study by researchers at the University of California Irvine) showed only a temporary boost in IQ, which was not significant enough to even last throughout the course of the experiment. Using music to influence intelligence was used in Confucian civilization and Plato alluded to Pythagorean music when he described is ideal state in ***The Republic.*** In both of these examples, music did not have caused any overwhelming changes, and the theory eventually died out. Linton also asks, "If Mozart's Music were able to improve health, why was Mozart himself so frequently sick? If listening to Mozart's music increases intelligence and encourages spirituality, why aren't the world's smartest and most spiritual people Mozart specialists?" Linton raises an interesting point, if the Mozart Effect causes such significant changes, why isn't there more documented evidence?

H. The "trendiness" of the Mozart Effect may have died out somewhat, but there are still strong supporters (and opponents) of the claims made in 1993. Since that initial experiment, there has not been a surge of supporting evidence. However, many parents, after playing classical music while pregnant or when theft children are young, will swear by the Mozart Effect. A classmate of mine once told me that listening to classical music while studying will help with memorization. If we approach this controversy from a scientific aspect, although there has been some evidence that music

does increase brain activity, actual improvements in learning and memory have not been adequately demonstrated.

Questions 1-5

Reading Passage 1 has eight paragraphs A-H.

Which paragraph contains the following information? ***Write the correct letter A-H in boxes 1-5 on your answer sheet.***

1 Music influences brain development of baby.

2 Popularity of public to the introduction of Mozart Effect

3 Description of the pioneer experiment of a person

4 Music is helpful as a healing method in some places

5 Learning needs other qualities though

Questions 6-8

Complete the summary below.

Choose NO MORE THAN THREE WORDS from the passage for each answer.

Write your answers in boxes 6-8 on your answer sheet.

In the experiment carried out by Frances Rauscher, participants were immersed in the music for a .....6.....period of time before they were tested. Rauscher suggested that enhancement of their performance is related to the.....7.....nature of Mozart's music. After that, another parallel experiment was also conducted on.....8.....

Questions 9-13

Do the following statements agree with the information given in Reading Passage 1

In boxes 9-13 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

9 Music has the power to improve people's brain performance according to the passage.

10 All neural connections are built up after a baby's born instead of the time he or she had born.

11 There is no one who questions Mozart Effect so far.

12 Michael Linton carried out further experiment on Mozart's life to support his viewpoint

13 Not sufficient evidence supports Mozart Effect from the very first experiment till now.

Section 2

London Swaying Footbridge

A. In September 1996 a competition was organized by the Financial Times in association with the London Borough of Southwark to design a new footbridge across the Thames. The competition attracted over 200 entries and was won by a team comprising Arup (engineers), Foster and Partners (architects) and the sculptor Sir Anthony Caro.

B. The bridge opened to the public on 10 June 2000. Up to 100,000 people crossed it that day with up to 2000 people on the bridge at any one time. At first, the bridge was still. Then it began to sway just slightly. Then, almost from one moment to the next, when large groups of people were crossing, the wobble intensified. This movement became sufficiently large for people to stop walking to retain their balance and sometimes to hold onto the hand rails for support. It was decided immediately to limit the number of people on the bridge, but even so the deck movement was sufficient to be uncomfortable and to raise concern for public safety so that on 12 June the bridge was closed until the problem could be solved.

C. The embarrassed engineers found the videotape that day which showed the center span swaying about 3 inches side to side every second. The engineers first thought that winds might be exerting excessive force on the many large flags and banners bedecking the bridge for its gala premiere. What's more, they also discovered that the pedestrians also played a key role. Human activities, such as walking, running, jumping, swaying, etc. could cause horizontal force which in turn could cause excessive dynamic vibration in the lateral direction in the bridge. As the structure began moving, pedestrians adjusted their gait to the same lateral rhythm as the bridge. The adjusted footsteps magnified the motion - just like when four people all stand up in a small boat at the same time. As more pedestrians locked into the same rhythm, the increasing oscillations led to the dramatic swaying captured on film.

D. In order to design a method of reducing the movements, the force exerted by the pedestrians had to be quantified and related to the motion of the bridge. Although there are some descriptions of this phenomenon in existing literature, none of these actually quantifies the force. So there was no quantitative analytical way to design the bridge against this effect. An

immediate research program was launched by the bridge's engineering designers Ove Arup, supported by a number of universities and research organizations.

E. The tests at the University of Southampton involved a person walking 'on the spot' on a small shake table. The tests at Imperial College involved persons walking along a specially built, 7.2m-long platform which could be driven laterally at different frequencies (n and amplitudes. Each type of test had its limitations. The Imperial College tests were only able to capture 7-8 footsteps, and the 'walking on the spot' tests, although monitoring many footsteps, could not investigate normal forward walking. Neither test could investigate any influence of other people in a crowd on the behavior of the individual being tested.

F. The results of the laboratory tests provided information which enabled the initial design of a retro-fit to be progressed. However, the limitations of these tests was clear and it was felt that the only way to replicate properly the precise conditions of the Millennium Bridge was to carry out crowd tests on the bridge deck itself. These tests done by the Arup engineers could incorporate factors not possible in the laboratory tests. The first of these was carried out with 100 people in July 2000. The results of these tests were used to refine the load model for the pedestrians. A second series of crowd tests was carried out on the bridge in December 2000. The purpose of these tests was to further validate the design assumptions and to load test a prototype damper installation. The test was carried out with 275 people.

G. Unless the usage of the bridge was to be greatly restricted, only two generic options to improve its performance were considered feasible. The first was to increase the stiffness of the bridge to move all its lateral natural frequencies out of the range that could be excited by the lateral footfall forces, and the second was to increase the damping of the bridge to reduce the resonant response.

You should spend about 20 minutes on question 14-26, which are based on reading passage 2 on the following pages.

Questions 14-17

*Choose **FOUR** letters, **A-H.***

Write the correct letters in boxes 14-17 on your answer sheet.

Which FOUR of the following situation were witnessed on the opening ceremony of the bridge?

A The frequency of oscillation increased after some time.

B All the engineers went to see the ceremony that day.

C The design of the bridge astonished the people.

D Unexpected sideway movement of the bridge occurred.

E Pedesfrians had difficulty in walking on the deck.

F The bridge fell down when people tried to retain their balance.

G Vibration could be detected on the deck by the pedestrians.

H It was raining when the ceremony began.

Questions 18-22

Complete the following summary of the paragraphs of Reading Passage 2 using NO MORE THAN THREE WORDS from the Reading Passage for each answer.

Write your answers in boxes 18-22 on your answer sheet

After the opening ceremony, the embarrassed engineers tried to find out the reason of the bridge's wobbling. Judged from the videotape, they thought that 18.....and 19.....might create excessive force on the bridge. The distribution of 20.....resulted from human activities could cause 21.....throughout the structure. This swaying prompted people to start adjusting the way they walk, which in turn reinforced the 22.....

Questions 23-26

Complete the table below.

Choose NO MORE THAN THREE WORDS from Reading Passage 2 for each answer.

Write your answers in boxes 23-26 on your answer sheet.

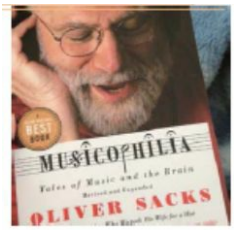
Research programs launched by universities and organizations

Universities / People	Activity
Test at 23…….	Limited ability to have 7-8 footsteps
'walking on the spot' at Southampton	Not enough data on 24……
Crowd test conducted by 25……	Aim to verify 26……

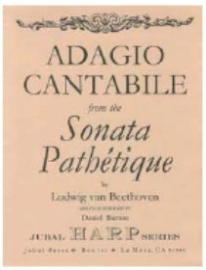
Section 3

Book review on Musiccophilia

Norman M. Weinberger reviews the latest work of Oliver Sacks



A. Music and the brain are both endlessly fascinating subjects, and as a neuroscientist specialising in auditory learning and memory, I find them especially intriguing. So I had high expectations of Musicophilia, the latest offering from neurologist and prolific author Oliver Sacks. And I confess to feeling a little guilty reporting that my reactions to the book are mixed.



B. Sacks himself is the best part of Musicophilia. He richly documents his own life in the book and reveals highly personal experiences. The photograph of him on the cover of the book- which shows him wearing headphones, eyes closed, clearly enchanted as he listens to Alfred Brendel

perform Beethoven's Pathetique Sonata-makes a positive impression that is home out by the contents of the book. Sacks's voice throughout is steady and erudite but never pontifical. He is neither self-conscious nor self-promoting.

C. The preface gives a good idea of what the book will deliver. In it Sacks explains that he wants to convey the insights gleaned from the "enormous and rapidly growing body of work on the neural underpinnings of musical perception and imagery, and the complex and often bizarre disorders to which these are prone." He also stresses the importance of "the simple art of observation" and

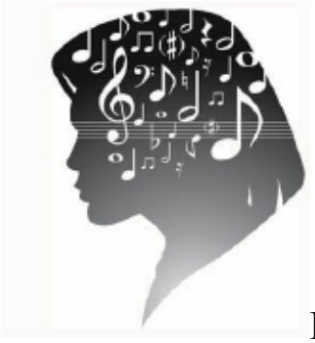
"the richness of the human context." He wants to combine "observation and description with the latest in technology," he says, and to imaginatively enter into the experience of his patients and subjects. The reader can see that Sacks, who has been practicing neurology for 40 years, is tom between the ' old-fashioned path o observation and the new fangled, high-tech approach: He knows that he needs to take heed of the latter, but his heart lies with the former.

D. The book consists mainly of detailed descriptions of cases, most of them involving patients whom Sacks has seen in his practice. Brief discussions of contemporary neuroscientific reports are sprinkled liberally throughout the text. Part, "Haunted by Music," begins with the strange case of Tony Cicoria, a nonmusical, middle-aged surgeon who was consumed by a love of music after being hit by lightning. He suddenly began to crave listening to piano music, which he had never cared for in the past. He started to play the piano and then to compose music, which arose spontaneously in his mind in a "torrent" of notes. How could this happen? Was the cause psychological? (He had had a near-death experience when the lightning struck him.) Or was it the direct result of a change in the auditory regions of his cerebral cortex? Electroencephalography (EEG) showed his brain waves to be normal in the mid-1990s, just after his, trauma and subsequent "conversion" to music. There are now more sensitive tests, but Cicoria, has declined to undergo them; he does not want to delve into the causes of his musicality. What a shame!

E. Part II, "A Range of Musicality," covers a wider variety of topics, but unfortunately, some of the chapters offer little or nothing that is new. For example, chapter 13, which is five pages long, merely notes that the blind often have better hearing than the sighted. The most interesting chapters are those that present the strangest cases. Chapter 8 is about "amusia," an inability to hear sounds as music, and "dysharmonia," a highly specific impairment of the ability to hear harmony, with the ability to understand melody left intact. Such specific "dissociations" are found throughout the cases Sacks recounts.

F. To Sacks's credit, part III, "Memory, Movement and Music," brings **US** into the underappreciated realm of music therapy. Chapter 16 explains how "melodic intonation therapy" is being used to help expressive aphasic patients (those unable to express their thoughts verbally following a stroke or other cerebral incident) once again become capable of fluent speech. In chapter 20, Sacks demonstrates the near-miraculous power of music to animate Parkinson's patients and other people with severe movement disorders, even those who are frozen into odd postures. Scientists cannot yet explain how music achieves this effect

G. To readers who are unfamiliar with neuroscience and music behavior, Musicophilia may be something of a revelation. But the book will not satisfy those seeking the causes and implications of the phenomena Sacks describes. For one thing, Sacks appears to be more at ease discussing patients than discussing experiments. And he tends to be rather uncritical in accepting scientific findings and theories.



H. It's true that the causes of music-brain oddities remain poorly understood. However, Sacks could have done more to draw out some of the implications of the careful observations that he and other neurologists have made and of the treatments that have been successful. For example, he might have noted that the many specific dissociations among components of music comprehension, such as loss of the ability to perceive harmony but not melody, indicate that there is no music center in the brain. Because many people who read the book are likely to believe in the brain localisation of all mental functions, this was a missed educational opportunity.

I. Another conclusion one could draw is that there seem to be no "cures" for neurological problems involving music. A drug can alleviate a symptom in one patient and aggravate it in another, or can have both positive and negative effects in the same patient. Treatments mentioned seem to be almost exclusively antiepileptic medications, which "damp down" the excitability of the brain in general; their effectiveness varies widely.

J. Finally, in many of the cases described here the patient with music-brain symptoms is reported to have "normal" EEG results. Although Sacks recognises the existence of new technologies, among them far more sensitive ways to analyze brain waves than the standard neurological EEG test, he does not call for their use. In fact, although he exhibits the greatest compassion for patients, he conveys no sense of urgency about the pursuit of new avenues in the diagnosis and treatment of music-brain disorders. This absence echoes the book's preface, in which Sacks expresses fear that "the simple art of observation may be lost" if we rely too much on new technologies. He does call for both approaches, though, and we can only hope that the neurological community will respond.

Questions 27-30

Choose the correct letter A, B, C or D.

Write the correct letter in boxes 27-30 on your answer sheet

27 Why does the writer have a mixed feeling about the book?

A The guilty feeling made him so.

B The writer expected it to be better than it was.

C Sacks failed to include his personal stories in the book.

D This is the only book written by Sacks.

28 What is the best part of the book?

A the photo of Sacks listening to music

B the tone of voice of the book

C the autobiographical description in the book

D the description of Sacks 's wealth

29 In the preface, what did Sacks try to achieve?

A make a herald introduction of the research work and technique applied

B give detailed description of various musical disorders

C explain how people understand music

D explain why he needs to do away with simple observation

30 What is disappointing about Tony Cicoria's case?

A He refuses to have further tests.

B He can't determine the cause of his sudden musicality.

C He nearly died because of the lightening.

D His brain waves were too normal to show anything.

Questions 31-36

Do the following statements agree with the views of the writer in Reading Passage 3?

In boxes 31-36 on your answer sheet write

YES *if the statement agrees with the views of the writer*

NO *if the statement contradicts with the views of the writer*

NOT GIVEN *if it is impossible to say what the writer thinks about this*

31 It is difficult to give a well-reputable writer a less than totally favorable review.

32 Beethoven's Pathetique Sonata is a good treatment for musical disorders.

33 Sacks believes technological methods is of little importance compared with traditional observation when studying his patients.

34 It is difficult to understand why music therapy is undervalued

35 Sacks held little skepticism when borrowing other theories and findings in describing reasons and notion for phenomena he depicts in the book.

36 Sacks is in a rush to use new testing methods to do treatment for patients.

Questions 37-40

Complete each sentence with the correct ending, A-F, below.

Write correct letter, A-F, in boxes 37-40 on your answer sheet

37 The content covered dissociations in understanding between harmony and melody

38 The study of treating musical disorders

39 The EEG scans of Sacks's patients

40 Sacks believes testing based on new technologies

A. show no music-brain disorders.

B. indicates that medication can have varied results,

C. is key for the neurological community to unravel the mysteries.

D. should not be used in Isolation.

E. indicate that not everyone can receive good education.

F. show a misconception that there is function centre localized in the brain

Reading Test 19

Section 1

The coming back of the "Extinct" Grass in Britain

A. It's ***Britain's dodo,*** called interrupted brome because of its gappy seed-head, this unprepossessing grass was found nowhere else in the world. Sharp-eyed Victorian botanists were the first to notice it, and by the 1920s the odd-looking grass had been found across much of southern England. Yet its decline was just as dramatic. By 1972 it had vanished from its last toehold-two hay fields at Pampisford, near Cambridge. Even the seeds stored at the Cambridge University Botanic Garden as an insurance policy were dead, having been mistakenly kept at room temperature. Botanists mourned: a unique living entity was gone forever.

B. Yet reports of its demise proved premature. Interrupted brome has come back from the dead, and not through any fancy genetic engineering. Thanks to one green-fingered botanist, interrupted brome is alive and well and living as a pot plant. Britain's dodo is about to become a phoenix, as conservationists set about relaunching its career in the wild.

C. At first, Philip Smith was unaware that the scrawny pots of grass on his bench were all that remained of a uniquely British species. But when news of the "extinction" of Bromus interruptus finally reached him, he decided to astonish his colleagues. He seized his opportunity at a meeting of the Botanical Society of the British Isles in Manchester in 1979, where he was booked to talk about his research on the evolution of the brome grasses. It was sad, he said, that interrupted brome had become extinct, as there were so many interesting questions botanists could have investigated. Then he whipped out two enormous pots of it. The extinct grass was very much alive.

D. It turned out that Smith had collected seeds from the brome's last refuge at Pampisford in 1963, shortly before the species disappeared from the wild altogether. Ever since then, Smith had grown the grass on, year after year. So in the end the hapless grass survived not through some high-powered conservation scheme or fancy genetic manipulation, but simply because one man was interested in it. As Smith points out, interrupted brome isn't particularly attractive and has no commercial value. But to a plant taxonomist, that's not what makes a plant interesting.

E. The brome's future, at least in cultivation, now seems assured. Seeds from Smith's plants have been securely stored in the state-of-the-art Millennium Seed Bank at Wakehurst Place in Sussex. And living plants thrive at the botanic gardens at Kew, Edinburgh and Cambridge. This year, "bulking up" is under way to make sure there are plenty of plants in all the gardens, and sackfuls of seeds are being stockpiled at strategic sites throughout the country.

F. The brome's relaunch into the British countryside is next on the agenda. English Nature has included interrupted brome in its Species Recovery Programme, and it is on track to be reintroduced into the agricultural landscape, if friendly farmers can be found. Alas, the grass is neither pretty nor useful-in fact, it is undeniably a weed, and a weed of a crop that nobody grows these days, at that. The brome was probably never common enough to irritate farmers, but no one would value it today for its productivity or its nutritious qualities. As a grass, it leaves agriculturalists cold.

So where did it come from? Smith's research into the taxonomy of the brome grasses suggests that interruptus almost certainly mutated from another weedy grass, soft brome, ***hordeaceus.*** So close is the relationship that interrupted brome was originally deemed to be a mere variety of soft brome by the great Victorian taxonomist Professor Hackel. But in 1895, George Claridge Druce, a 45-year-old Oxford pharmacist with a shop on the High Street, decided that it deserved species status, and convinced the botanical world. Druce was by then well on his way to fame as an Oxford don, mayor of the city, and a fellow of the Royal Society. A poor boy from Northamptonshire and a self-educated man, Druce became the leading field botanist of his generation. When Druce described a species, botanists took note.

H. The brome's parentage may be clear, but the timing of its birth is more obscure. According to agricultural historian Joan Thirsk, sainfoin and its friends made their first modest appearance in Britain in the early 1600s. Seeds brought in from the Continent were sown in pastures to feed horses and other livestock. But in those early days, only a few enthusiasts-mostly gentlemen keen to pamper theft best horses—took to the new crops.

I. Although the credit for the "discovery" of interrupted brome goes to a Miss A. M. Barnard, who collected the first specimens at Odsey, Bedfordshire, in 1849. The grass had probably lurked undetected in the English countryside for at least a hundred years. Smith thinks the botanical dodo probably evolved in the late 17th or early 18th century, once sainfoin became established.

J. Like many once-common arable weeds, such as the corncockle, interrupted brome seeds cannot survive long in the soil. Each spring, the brome relied on farmers to resow its seeds; in the days before weedkillers and sophisticated seed sieves, an ample supply would have contaminated stocks of crop seed. But fragile seeds are not the brome's only problem: this species is also reluctant to release its seeds as they ripen. Show it a ploughed field today and this grass will struggle to survive, says Smith. It will be difficult to establish in today's "improved" agricultural landscape, inhabited by notoriously vigorous competitors.

Questions 1-7

Do the following statements agree with the information given in Reading Passage 1 ***In boxes 1-7 on your answer sheet, write***

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

1 The name for interrupted brome is very special as its head shaped like a sharp eye

2 Interrupted brome thought to become extinct because there were no live seed even in a labs condition.

3 Philip Smith comes from University of Cambridge.

4 Reborn of the interrupted brome is attributed more to scientific meaning than seemingly aesthetic or commercial ones

5 English nature will operate to recover interrupted brome on the success of survival in Kew.

6 Interrupted Brome grow poorly in some competing modern agricultural environment with other plants

7 Media publicity plays a significant role to make interrupted brome continue to exist.

Questions 8-13

Use the information in the passage to match the people (listed A-F) with opinions or deeds below. Write the appropriate letters A-F in boxes 8-13 on your answer sheet.

NB: you may use any letter more than once

A. George Claridge Druce

B. Nathaniel Fiennes

C. Professor Hackel

D. A. M. Barnard

E. Philip Smith

F. Joan Thirsk

Choose the people who

8 reestablished the British unique plants

9 identified the interrupted brome as just to its parent brome

10 gave an independent taxonomy place to interrupted brome

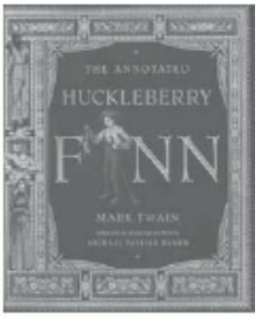
11 discovered and picked the first sample of interrupted brome

12 recorded the first 'show up' of sainfoin plants in Britain

13 collected the last seeds just before its extinction

Section 2

CHILDREN'S LITERATURE



A. Stories and poems aimed at children have an exceedingly long history: lullabies, for example, were sung in Roman times, and a few nursery games and rhymes are almost as ancient. Yet so far as written-down literature is concerned, while there were stories in print before 1700 that children often seized on when they had the chance, such as translations of Aesop's fables, fairy-stories and popular ballads and romances, these were not aimed at young people in particular. Since the only genuinely child-oriented literature at this time would have been a few instructional works to help with reading and general knowledge, plus the odd Puritanical tract as an aid to morality, the only course for keen child readers was to read adult literature. This still occurs today, especially with adult thrillers or romances that include more exciting, graphic detail than is normally found in the literature for younger readers.

B. By the middle of the 18th century there were enough eager child readers, and enough parents glad to cater to this interest, for publishers to specialize in children's books whose first aim was pleasure rather than education or morality. In Britain, a London merchant named Thomas Boreham produced *Cajanus, The Swedish Giant* in 1742, while the more famous John Newbery published *A Little Pretty Pocket Book* in 1744.1ts contents rhymes, stories, children's games plus a free gift ('A ball and a pincushion') in many ways anticipated the similar lucky-dip contents of children's annuals this century. It is a tribute to Newbery's flair that he hit upon a winning formula quite so quickly, to be pirated almost immediately in America.

C. Such pleasing levity was not to last. Influenced by Rousseau, whose (1762) decreed that all books for children save *Robinson Crusoe* were a dangerous diversion, contemporary critics saw to it that children's literature should be instructive and uplifting. Prominent among such voices was Mrs. Sarah Trimmer, whose magazine *The Guardian of Education* (1802) carried the first regular reviews of children's books. It was she who condemned fairy-tales for their violence and general absurdity; her own stories, *Fabulous Histories* (1786) described talking animals who were always models of sense and decorum.

D. So the moral story for children was always threatened from within, given the way children have of drawing out entertainment from the sternest moralist. But the greatest blow to the improving children's book was to come from an unlikely source indeed: early 19th-century interest in folklore. Both nursery rhymes, selected by James Orchard Halliwell for a folklore society in 1842, and collection of fairy-stories by the scholarly Grimm brothers, swiftly translated into English in 1823, soon rocket to popularity with the young, quickly leading to new editions, each one more child-centered than the last. From now on younger children could expect stories written for their particular interest and with the needs of their own limited experience of life kept well to the fore.

E. What eventually determined the reading of older children was often not the availability of special children's literature as such but access to books that contained characters, such as young people or animals, with whom they could more easily empathize, or action, such as exploring or fighting, that made few demands on adult maturity or understanding.

F. The final apotheosis of literary childhood as something to be protected from unpleasant reality came with the arrival in the late 1930s of child-centered best-sellers intend on entertainment at its most escapist. In Britain novelist such as Enid Blyton and Richmal Crompton described children who were always free to have the most unlikely adventures, secure in the knowledge that nothing bad could ever happen to them in the end. The fact that war broke out again during her books' greatest popularity fails to register at all in the self-enclosed world inhabited by Enid Blyton's young characters. Reaction against such dream-worlds was inevitable after World War II, coinciding with the growth of paperback sales, children's libraries and a new spirit of moral and social concern. Urged on by committed publishers and progressive librarians, writers slowly began to explore new areas of interest while also shifting the settings of their plots from the middle-class world to which their chiefly adult patrons had always previously belonged.

G. Critical emphasis, during this development, has been divided. For some the most important task was to rid children's books of the social prejudice and exclusiveness no longer found acceptable. Others concentrated more on the positive achievements of contemporary children's literature. That writers of these works are now often recommended to the attentions of adult as well as child readers echoes the 19th-century belief that children's literature can be shared by the generations, rather than being a defensive barrier between childhood and the necessary growth towards adult understanding.

Questions 14-18

Complete the table below.

Choose NO MORE THAN TWO WORDS from Reading Passage 2 for each answer. Write your answers in boxes 14-18 on your answer sheet.

DATE	**FEATURES**	**AIM**	**EXAMPLE**
Before 1700	Not aimed at young children	Education and morality	Puritanical tract
By the middle of 18th century	Collection of rhymes 14_____ and games	Read for pleasure	A Little Pretty Pocket Book (exported to 15_____)
Early 19th century	Growing interest in 16____	To be more children-centered	Nursery rhymes and 17____
Late 1930s	Stories of harm-free 18____	Entertainment	Enid Blyton and Richamal Crompton's novels

Questions 19- 21

Look at the following people and the list of statements below.

Match each person with the correct statement.

Write the correct letter A-E in boxes 19-21 on your answer sheet.

19 Thomas Boreham

20 Mrs. Sarah trimmer

21 Grimm Brothers

List of statements

A Wrote criticisms of children's literature

B Used animals to demonstrate the absurdity of fairy tales

C Was not a writer originally

D Translated a book into English

E Didn't write in the English language

Questions 22-26

*Do the following statements agree with the information given in Reading Passage **2?** In boxes **22-26** on your answer sheet write*

TRUE *if the statement agrees with the information*

FALSE *if the statement contradicts the information*

NOT GIVEN *if there is no information on this*

---

22 Children didn't start to read books until 1700.

23 Sarah Trimmer believed that children's books should set good examples.

24 Parents were concerned about the violence in children's books.

25 An interest in the folklore changed the direction of the development of children's books.

26 Today children's book writers believe their works should appeal to both children and adults.

Section 3

Beyond the Blue Line

A. Much of the thrill of venturing to the far side of the world rests on the romance of difference. So one feels certain sympathy for Captain James Cook on the day in 1778 that he ''discovered" Hawaii. Then on his third expedition to the Pacific, the British navigator had explored scores of islands across the breadth of the sea, from lush New Zealand to the lonely wastes of Easter Island. This latest voyage had taken him thousands of miles north from the Society Islands to an irchipelago so remote that even the old Polynesians back on Tahiti knew nothing about it. Imagine Cook's surprise, then, when the natives of Hawaii came paddling out in their canoes and greeted him in a familiar tongue, one he had heard on virtually every mote of inhabited land he had visited. Marveling at the ubiquity of this Pacific language and culture, he later wondered in his journal: "How shall we account for this Nation spreading itself so far over this vast ocean?"

B. That question, and others that flow from it, has tantalized inquiring minds for centuries: Who were these amazing seafarers? Where did they come from, starting more than 3,000 years ago? And how could a Neolithic people with simple canoes and no navigation gear manage to find, let alone colonize, hundreds of far-flung island specks scattered across an ocean that spans nearly a third of the globe? Answers have been slow in coming. But now a startling archaeological find on the island of Efate, in the Pacific nation of Vanuatu, has revealed an ancient seafaring people, the distant ancestors of today's Polynesians, taking their first steps into the unknown. The discoveries there have also opened a window into the shadowy world of those early voyagers.

C. ”What we have is a first- or second-generation site containing the graves of some of the Pacific’s first explorers," says Spriggs, professor of archaeology at the Australian National University and co-leader of an international team excavating the site. It came to light only by luck. A backhoe operator, digging up topsoil on the grounds of a derelict coconut plantation, scraped open a grave—the first of dozens in a burial ground some 3,000 years old. It is the oldest cemetery ever found in the Pacific islands, and it harbors the bones of an ancient people archaeologists call the Lapita, a label that derives from a beach in New Caledonia where a landmark cache of their pottery was found in the 1950s.

D. They were daring blue-water adventurers who oved the sea not just as explorers but also as pioneers, bringing along everything they would need to build new lives—their families and livestock, taro seedlings and stone tools. Within the span of a few centuries the Lapita stretched the boundaries of their world from the jungle-clad volcanoes of Papua New Guinea to the loneliest coral outliers of Tonga, at least 2,000 miles eastward in the Pacific. Along the way they explored millions of square miles of unknown sea, discovering and colonizing scores of tropical islands never before seen by human eyes: Vanuatu, New Caledonia, Fiji, Samoa.

It was their descendants, centuries later, who became the great Polynesian navigators we all tend to think of: the Tahitians and Hawaiians, the New Zealand Maori, and the curious people who erected those statues on Easter Island. But it was the Lapita who laid the foundation—who bequeathed to the islands the language, customs, and cultures that their more famous descendants carried around the Pacific.

E. While the Lapita left a glorious legacy, they also left precious few clues about themselves. A particularly intriguing clue comes from chemical tests on the teeth of several skeletons. Then as now, the food and water you consume as a child deposits oxygen, carbon, strontium, and other elements in your still-forming adult teeth. The isotope signatures of these elements vary subtly from place to place, so that if you grow up in, say, Buffalo, New York, then spend your adult life in California, tests on the isotopes in your teeth will always reveal your eastern roots.

Isotope analysis indicates that several of the Lapita buried on Efate didn't spend their childhoods here but came from somewhere else. And while isotopes can't pinpoint their precise island of origin, this much is clear: At some point in their lives, these people left the villages of their birth and made a voyage by seagoing canoe, never to return. DNA teased from these ancient bones may also help answer one of the most puzzling questions in Pacific anthropology: Did all Pacific islanders spring from one source or many? Was there only one outward migration from a single point in Asia, or several from different points? "This represents the best opportunity we've had yet," says Spriggs, "to find out who the Lapita actually were, where they came from, and who their closest descendants are today."

F. There is one stubborn question for which archaeology has yet to provide any answers: How did the Lapita accomplish the ancient equivalent of a moon landing, many times over? No one has found one of their canoes or any rigging, which could reveal how the canoes were sailed. Nor do the oral histories and traditions of later Polynesians offer any insights.

"All we can say for certain is that the Lapita had canoes that were capable of ocean voyages, and they had the ability to sail them," says Geoff Irwin, a professor of archaeology at the University of Auckland and an avid yachtsman. Those sailing skills, he says, were developed and passed down over thousands of years by earlier mariners who worked their way through the archipelagoes of the

western Pacific making short crossings to islands within sight of each other. The real adventure didn't begin, however, until their Lapita descendants neared the end of the Solomons chain, for this was the edge of the world. The nearest landfall, the Santa Cruz Islands, is almost 230 miles away, and for at least 150 of those miles the Lapita sailors would have been out of sight of land, with empty horizons on every side.

G. The Lapita's thrust into the Pacific was eastward, against the prevailing trade winds, Irwin notes. Those nagging headwinds, he argues, may have been the key to their success. 'They could sail out for days into the unknown and reconnoiter, secure in the knowledge that if they didn't find anything, they could turn about and catch a swift ride home on the trade winds. It's what made the whole thing work." Once out there, skilled seafarers would detect abundant leads to follow to land: seabirds and turtles, coconuts and twigs carried out to sea by the tides, and the afternoon pileup of clouds on the horizon that often betokens an island in the distance.

All this presupposes one essential detail, says Atholl Anderson, professor of prehistory at the Australian National University and, like Irwin, a keen yachtsman: that the Lapita had mastered the advanced art of tacking into the wind. "And there's no proof that they could do any such thing," Anderson says. "There has been this assumption that they must have done so, and people have built canoes to re-create those early voyages based on that assumption. But nobody has any idea what their canoes looked like or how they were rigged."

H. However they did it, the Lapita spread themselves a third of the way across the Pacific, then called it quits for reasons known only to them. Ahead lay the vast emptiness of the central Pacific, and perhaps they were too thinly stretched to venture farther. They probably never numbered more than a few thousand in total, and in their rapid migration eastward they encountered hundreds of islands—more than 300 in Fiji alone. Supplied with such an embarrassment of riches, they could settle down and enjoy what for a time were Earth's last Edens.

I. Rather than give all the credit to human skill and daring, Anderson invokes the winds of chance. El Nino, the same climate disruption that affects the Pacific today, may have helped scatter the first settlers to the ends of the ocean, Anderson suggests. Climate data obtained from slow-growing corals around the Pacific and from lake-bed sediments in the Andes of South America point to a series of unusually frequent El Ninos around the time of the Lapita expansion, and again between 1,600 and 1,200 years ago, when the second wave of pioneer navigators made their voyages farther east, to the remotest comers of the Pacific. By reversing the regular east-to-west flow of the trade winds for weeks at a time, these "super El Ninos" might have sped the Pacific's ancient mariners on long, unplanned voyages far over the horizon. The volley of El Ninos that coincided with the second wave of voyages could have been key to launching Polynesians across the wide expanse of open water between Tonga, where the Lapita stopped, and the distant archipelagoes of eastern Polynesia. "Once they crossed that gap, they could island hop throughout the region, and from the Marquesas it's mostly downwind to Hawaii," Anderson says. It took another 400 years for mariners to reach Easter Island, which lies in the opposite direction—normally upwind. "Once again this was during a period of frequent El Nino activity."

Questions 27-31

Complete the summary with the list of words A-L below.

Write the correct letter A-L in boxes 27-31 on your answer sheet.

The question, arisen from Captain Cook's expedition to Hawaii, and others derived from it, has fascinated researchers for a long time. However, a surprising archaeological find on Efate began to provide valuable information about the 27.....On the excavating site, a 28.....containing 29.....of Lapita was uncovered Later on, various researches and tests have been done to study the ancient people - Lapita and their 30..... How could they manage to spread themselves so far over the vast ocean? All that is certain is that they were good at canoeing. And perhaps they could take well advantage of the trade wind But there is no 31.....of it.

A	bones	B co-leader	C descendents	D. international team
E	inquiring minds	F proof	G ancestors	H early seafarers
I	pottery	J assumption	K horizons	L grave

Questions 32-35

*Choose the correct letter, A, **B,** c or **D.***
Write your answers in boxes 32-35 on your answer sheet.

32 The chemical tests indicate that

A. the elements in one's teeth varied from childhood to adulthood.
B. the isotope signatures of the elements remain the same in different places,
C. the result of the study is not fascinating.
D. these chemicals can't conceal one's origin.

33 The isotope analysis from the Lapita

A. exactly locates their birth island.
B. reveals that the Lapita found the new place via straits,
C. helps researchers to find out answers about the islanders.
D. leaves more new questions for anthropologists to answer.

34 According paragraph F, the offspring of Lapita

A were capable of voyages to land that is not accessible to view.
B were able to have the farthest voyage of 230 miles,

C worked their way through the archipelagoes of the western Pacific.

D fully explored the horizons.

35 Once out exploring the sea, the sailors

A always found the trade winds unsuitable for sailing.

B could return home with various clues.

C sometimes would overshoot their home port and sail off into eternity.

D would sail in one direction.

Questions 36-40

Do the following statements agree with the information given in Reading Passage 3? In boxes 36-40 on your answer sheet, write

TRUE if the statement is true

FALSE if the statement is false

NOT GIVEN if the information is not given in the passage

36 The Lapita could canoe in the prevailing wind.

37 It was difficult for the sailors to find ways back, once they were out.

38 The reason why the Lapita stopped canoeing farther is still unknown.

39 The majority of the Lapita dwelled on Fiji.

40 The navigators could take advantage of El Nino during their forth voyages.

Reading Test 20

Section 1

world Ecotourism in the developing courtiers

A. The Ecotourism Society defines ecotourism as "a responsible travel to natural areas which conserves the environment and improves the welfare of local people". It is recognised as being particularly conducive to enriching and enhancing the standing of tourism, on the basis that this form of tourism respects the natural heritage and local populations and are in keeping with the carrying capacity of the sites.

Cuba

B. Cuba is undoubtedly an obvious site for ecotourism, with its picturesque beaches, underwater beauty, countryside landscapes, and ecological reserves. An educated population and improved infrastructure of roads and communications adds to the mix. In the Caribbean region, Cuba is now the second most popular tourist destination.

Ecotourism is also seen as an environmental education opportunity to heighten both visitors' and residents' awareness of environmental and conservation issues, and even to inspire conservation action.

Ecotourism has also been credited with promoting peace, by providing opportunities for educational and cultural exchange. Tourists' safety and health are guaranteed

Raul Castro, brother of the Cuban president, started this initiative to rescue the Cuban tradition of herbal medicine and provide natural medicines for its healthcare system. The school at Las Terrazas Eco-Tourism Community teaches herbal healthcare and children learn not only how to use medicinal herbs, but also to grow them in the school garden for teas, tinctures, ointments and creams.

In Cuba, ecotourism has the potential to alleviate poverty by bringing money into the economy and creating jobs. In addition to the environmental impacts of these efforts, the area works on developing community employment opportunities for locals, in conjunction with ecotourism.

South America

C. In terms of South America, it might be the place which shows the shortcoming of ecotourism. Histoplasma capsulatum (see chapter "Histoplasmosis and HIV"), a dimorphic fungus, is the most common endemic mycosis in the United States, (12) and is associated with exposure to bat or bird droppings. Most recently, outbreaks have been reported in healthy travelers who returned from Central and South America after engaging in recreational activities associated with spelunking, adventure tourism, and ecotourism. It is quite often to see tourists neglected sanitation while travelling. After engaging in high-risk activities, boots should be hosed off and clothing placed in airtight plastic bags for laundering. HIV-infected travelers should avoid risky behaviors or environments, such as exploring caves, particularly those that contain bat droppings.

D. Nowhere is the keen eye and intimate knowledge of ecotourism is more amidst this fantastic biodiversity, as we explore remote realms rich in wildlife rather than a nature adventure. A sustainable tour is significant for ecotourism, one in which we can grow hand in hand with nature and our community, respecting everything that makes **US** privileged Travelers get great joy from every step that take forward on this endless but exciting journey towards sustainability. The primary threats

to South America's tropical forests are deforestation caused by agricultural expansion, cattle ranching, logging, oil extraction and spills, mining, illegal coca farming, and colonization initiatives. Deforestation has shrunk territories belonging to indigenous peoples and wiped out more than 90% of the population. Many are taking leading roles in sustainable tourism even as they introduce protected regions to more travelers.

East Africa

E. In East Africa, significantly reducing such illegal hunting and allowing wildlife populations to recover would allow the generation of significant economic benefits through trophy hunting and potentially ecotourism. "Illegal hunting is an extremely inefficient use of wildlife resources because it fails to capture the value of wildlife achievable through alternative forms of use such as trophy hunting and ecotourism," said Peter Lindsey, author of the new study. Most residents believed that ecotourism could solve this circumstance. They have passion for focal community empowerment, loves photography and writes to laud current focal conservation efforts, create environmental awareness and promote ecotourism.

Indonesia

F. In Indonesia, ecotourism started to become an important concept from 1995, in order to strengthen the domestic travelling movement; the focal government targeting the right markets is a prerequisite for successful ecotourism. The market segment for Indonesian ecotourism consists of: (i) "The silent generation", 55-64 year-old people who are wealthy enough, generally well-educated and have no dependent children, and can travel for four weeks; (ii) "The baby boom generation", junior successful executives aged 35-54 years, who are likely to be travelling with their family and children (spending 2-3 weeks on travel) — travelling for them is a stress reliever; and (iii) the "X generation", aged 18-29 years, who love to do ecotours as backpackers — they are generally students who can travel for 3-12 months with monthly expenditure of US$300-500. It is suggested that promotion of Indonesian ecotourism products should aim to reach these various cohorts of tourists. The country welcomes diverse levels of travelers.

G. On the other hand, ecotourism provide as many services as traditional tourism. Nestled between Mexico, Guatemala and the Caribbean Sea is the country of Belize. It is the wonderful place for Hamanasi honeymoon, bottle of champagne upon arrival, three meals daily, a private service on one night of your stay and a choice of adventures depending on the length of your stay. It also offers six-night and seven-night honeymoon packages. A variety of specially tailored tours, including the Brimstone Hill Fortress, and a trip to a neighboring island Guided tours include rainforest, volcano and off-road plantation tours. Gregory Pereira, an extremely knowledgeable and outgoing hiking and tour guide, says the following about his tours: "All of our tours on StKitts include transportation by specially modified Land Rovers, a picnic of island pastries and focal fruit, fresh tropical juices, CSR, a qualified island guide and a full liability insurance coverage for participants.

H. Kodai is an ultimate splendor spot for those who love being close to mother nature. They say every bird must sing it's own throat while we say every traveller should find his own way out of variegated and unblemished paths of deep valleys and steep mountains. The cheese factory here exports great quantity of cheese to various countries across the globe. It is located in the center of forest Many travelers are attracted by the delicious cheese. The ecotourism is very famous this different eating experience.

Question 1 -5

Use the information in the passage to match the place (listed A-D) with opinions or deeds below. Write the appropriate letters A-D in boxes 1-5 on your answer sheet. ***NB*** *You may use any letter more than once.*

A Cuba **B East Africa** **c South America** **D Indonesia**

1 a place to improve local education as to help tourists

2 a place suitable for both rich and poor travelers

3 a place where could be easily get fungus

4 a place taking a method to stop unlawful poaching

5 a place where the healthcare system is developed

Questions 6-9

Use the information in the passage to match the companies (listed A-D) with opinions or deeds below. Write the appropriate letters A, B, c or D in boxes 6-9 on your answer sheet.

A eating the local fruits at the same time

B find job opportunities in community

C which is situated on the heart of jungle

D with private and comfortable service

---

6 Visiting the cheese factory

7 Enjoying the honeymoon

8 Having the picnic while

9 The residents in Cuba could

Questions 10-13

Summary

Complete the following summary of the paragraphs of Reading Passage, using ***no more than two*** *words from the Reading Passage for each answer. Write your answers in boxes* ***10-13*** *on your answer sheet.*

Ecotourism is not a nature 10.....but a 11..... tour. The reason why South America promotes ecotourism is due to the destruction of 12..... In addition, East Africa also encourages this kind of tourism for cutting the 13.....in order to save wild animals.

Section 2

Memory and age

A. Aging, it is now clear, is part of an ongoing maturation process that all our organs go through. "In a sense, aging is keyed to the level of vigor of the body and the continuous interaction between levels of body activity and levels of mental activity," reports Arnold B. Scheibel, M.D., whose very academic title reflects how once far-flung domains now converge on the mind and the brain. Scheibel is professor of anatomy, cell biology, psychiatry, and behavioral sciences at the University of California at Los Angeles, and director of the university's Brain Research Institute. Experimental evidence has backed up popular assumptions that the aging mind undergoes decay analogous to that of the aging body. Younger monkeys, chimps, and lower animals consistently outperform then older colleagues on memory tests. In humans, psychologists concluded, memory and other mental functions deteriorate over time because of inevitable organic changes m the brain as neurons die off. Mental decline after young adulthood appeared inevitable.

B. Equipped with imaging techniques that capture the brain in action, Stanley Rapoport, Ph.D., at the National Institutes of Health, measured the flow of blood in the brains of old and young people as they went through the task of matching photos of faces. Since blood flow reflects neuronal activity, Rapoport could compare which networks of neurons were being used by different subjects. "Even when the reaction times of older and younger subjects were the same, the neural networks they used were significantly different. The older subjects were using different internal strategies to accomplish the same result in the same time," Rapoport says. Either the task required greater effort on the part of the older subjects or the work of neurons originally involved in tasks of that type had been taken over by other neurons, creating different networks.

C. At the Georgia Institute of Technology, psychologist Timothy Salthouse, Ph.D., compared a group of very fast and accurate typists of college age with another group in their 60s. Since reaction time is faster in younger people and most people's fingers grow less nimble with age, younger typists might be expected to tap right along while the older ones fumble. But both typed 60 words a minute. The older typists it turned out, achieved their speed with cunning little strategies that made them far more efficient than their younger counterparts: They made fewer finger movements, saving a fraction of a second here and there. They also read ahead in the text. The neural networks involved in typing appear to have been reshaped to compensate for losses in motor skills or other age changes.

D. "When a rat is kept in isolation without playmates or objects to interact with, the animal's brain shrinks, but if we put that rat with 11 other rats in a large cage and give them an assortment of wheels, ladders, and other toys, we can show—after four days— significant differences in its brain," says Diamond, professor of integrative biology. Proliferating dendrites first appear in the visual association areas. After a month in the enriched environment, the whole cerebral cortex has expanded, as has its blood supply. Even in the enriched environment, rats get bored unless the toys

are varied. "Animals are just like we are. They need stimulation," says Diamond.

One of the most profoundly important mental functions is memory-notorious for its failure with age. So important is memory that the Charles A. Dana Foundation recently spent $8.4 million to set up a consortium of leading medical centers to measure memory loss and aging through brain-imaging technology, neurochemical experiments, and cognitive and psychological tests. One thing, however, is already fairly clear—many aspects of memory are not a function of age at all but of education. Memory exists in more than one form, what we call knowledge-facts—is what psychologists such as Harry p. Bahrick, Ph.D., of Ohio Wesleyan University calls semantic memory. Events, conversations, and occurrences in time and space, on the other hand, make up episodic or event memory, which is triggered by cues from the context. If you were around in 1963 you don't need to be reminded of the circumstances surrounding the moment you heard that JFK had been assassinated. That event is etched into your episodic memory.

E. When you forget a less vivid item, like buying a roll of paper towels at the supermarket, you may blame it on your aging memory. It's true that episodic memory begins to decline when most people are in their 50s, but it's never perfect at any age. "Every memory begins as an event," says Bahrick. "Through repetition, certain events leave behind a residue of knowledge, or semantic memory. On a specific day in the past, somebody taught you that two and two are four, but you've been over that information so often you don't remember where you learned it. What started as an episodic memory has become a permanent part of your knowledge base." You remember the content, not the context. Our language knowledge, our knowledge of the world and of people, is largely that permanent or semipermanent residue.

F. Probing the longevity of knowledge, Bahrick tested 1,000 high school graduates to see how well they recalled their algebra. Some had completed the course as recently as a month before, others as long as 50 years earlier. He also determined how long each person had studied algebra, the grade received, and how much the skill was used over the course of adulthood. Surprisingly, a person's grasp of algebra at the time of testing did not depend on how long ago he'd taken the course—the determining factor was the duration of instruction. Those who had spent only a few months learning algebra forgot most of it within two or three years.

G. In another study, Bahrick discovered that people who had taken several courses in Spanish, spread out over a couple of years, could recall, decades later, 60 percent or more of the vocabulary they learned. Those who took just one course retained only a trace after three years. "This long-term residue of knowledge remains stable over the decades, independent of the age of the person and the age of the memory. No serious deficit appears until people get to their 50s and 60s, probably due to the degenerative processes of aging rather than a cognitive loss."

H. "You could say metamemory is a byproduct of going to school,[1]" says psychologist Robert Kail, Ph.D, of Purdue University, who studies children from birth to 20 years, the time of life when mental development is most rapid. "The question-and-answer process, especially exam-taking, helps children leam-and also teaches them how then memory works This may be one reason why, according to a broad range of studies in people over 60, the better educated a person is, the more likely they are to perform better in life and on psychological tests. A group of adult novice chess players were compared with a group of child experts at the game. In tests of then ability to remember a random series of numbers, the adults, as expected, outscored the children. But when asked to remember the patterns of chess pieces arranged on a board, the children won. "Because they'd played a lot of chess, their knowledge of chess was better organized than that of the adults, and then existing knowledge of chess served as a framework for new memory," explains Kail.

I. Specialized knowledge is a mental resource that only improves with time. Crystallized intelligence about one's occupation apparently does not decline at all until at least age 75, and if there is no disease or dementia, may remain even longer, special knowledge is often organized by a process called "chunking.[1]" If procedure A and procedure B are always done together, for example, the mind may merge them into a single command. When you apply yourself to a specific interest-say, cooking—you build increasingly elaborate knowledge structures that let you do more and do it better. This ability, which is tied to experience, IB the essence of expertise. Vocabulary is one such specialized form of accrued knowledge. Research clearly shows that vocabulary improves with time. Retired professionals, especially teachers and journalists, consistently score higher on tests of vocabulary and general information than college students, who are supposed to be in their mental prime.

Questions 14-17

*Choose the correct letter, A, B, **c** or D.*

Write your answers in boxes 14-17 on your answer sheet.

14 What does the experiment of typist show in the passage?

A. Old people reading ability is superior

B. Losses of age is irreversible

C. Seasoned tactics made elders more efficient

D. Old people performed poorly in driving test

15 Which is correct about rat experiment?

A. Different toys have different effect for rats

B. Rat's brain weight increased in both cages

C. Isolated rat's brain grows new connections

D. Boring and complicated surroundings affect brain development

16 What can be concluded in chess game of children group?

A. They won game with adults.

B. Then organization of chess knowledge is better

C. Then image memory is better than adults

D. They used different part of brain when playing chess

17 What is author's purpose of using "vocabulary study" at the end of passage?

A. Certain people are sensitive to vocabularies while others aren't

B. Teachers and professionals won by then experience

C. Vocabulary memory as a crystallized intelligence is hard to decline

D. Old people use their special zone of brain when study

Questions 18-23

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 18-23 on your answer sheet.

It's long been known that as one significant mental function, ____18_____ deteriorates with age. Charles A. Dana foundation invested millions of dollars to test memory decline. They used advanced technology, neurochemical experiments and ran several cognitive and _____19_____experiments. Bahrick called one form "_____20_____", which describes factual knowledge. Another one called "_____21_____" contains events in time and space format. He conducted two experiments toward to knowledge memory's longevity, he asked 1000 candidates some knowledge of _____22_____, some could even remember it decades ago. Second research of Spanish course found that multiple courses participants could remember more than half of _____23____they learned after decades, whereas single course taker only remembered as short as 3 years.

Questions 24-27

Use the information in the passage to match the people (listed A-F) with opinions or deeds below. Write the appropriate letters A-F in boxes 24-27 on your answer sheet.

A. Harry p. Bahrick

B. Arnold B. Scheibel

C. Marion Diamond

D. Timothy Salthouse

E. Stanley Rapport

F. Robert Kail

---

24 Examined both young and old's blood circulation of brain while testing.

25 Aging is a significant link between physical and mental activity.

26 Some semantic memory of a event would not fade away after repetition.

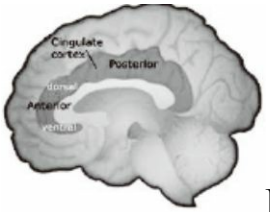
27 Rat's brain developed when put in a diverse environment.

Section 3

You should spend about 20 minutes on Questions 28-40, which are based on Reading Passage 3 on the following pages.

The secret of the Yawn

A. When a scientist began to study yawning in the 1980s, it was difficult to convince some of his research students of the merits of "yawning science." Although it may appear quirky, his decision to study yawning was a logical extension to human beings of my research in developmental neuroscience, reported in such papers as "Wing-flapping during Development and Evolution." As a neurobehavioral problem, there is not much difference between the wing-flapping of birds and the face- and body-flapping of human yawners.



B. Yawning is an ancient, primitive act. Humans do it even before they are born, opening wide in the womb. Some snakes unhinge then jaws to do it. One species of penguins yawns as part of mating. Only now are researchers beginning to understand why we yawn, when we yawn and why we yawn back. A professor of cognitive neuroscience at Drexel University in Philadelphia, Steven Platek, studies the act of contagious yawning, something done only by people and other primates.

C. In his first experiment, he used a psychological test to rank people on then empathic feelings. He found that participants who did not score high on compassion did not yawn back. "We literally had people saying, 'Why am I looking at people yawning?"[1] Professor Platek said. "It just had no effect."

D. For his second experiment, he put 10 students in an magnetic resonance imaging machine as they watched video tapes of people yawning. When the students watched the videos, the part of the brain which reacted was the part scientists believe controls empathy - the posterior cingulate, in the brain's middle rear." I don't know if it's necessarily that nice people yawn more, but I think it's a good indicator of a state of mind," said Professor Platek. "It's also a good indicator if you're empathizing with me and paying attention."

E. His third experiment is studying yawning in those with brain disorders, such as autism and schizophrenia, in which victims have difficulty connecting emotionally with others. A psychology professor at the University of Maryland, Robert Provine, is one of the few other researchers into yawning. He found the basic yawn lasts about six seconds and they come in bouts with an interval of about 68 seconds. Men and women yawn or half-yawn equally often, but men are significantly less likely to cover then mouths which may indicate complex distinction in genders." A watched yawner never yawns," Professor Provine said. However, the physical root of yawning remains a mystery. Some researchers say it's coordinated within the lypothal of the brain, the area that also controls breathing.

F. Yawning and stretching also share properties and may be performed together as parts of a global motor complex. But they do not always co-occur people usually yawn when we stretch, but we don't always stretch when we yawn, especially before bedtime. Studies by J. I. P, G. H. A. Visser and H. F. Prechtl in the early 1980s, charting movement in the developing fetus using ultrasound, observed not just yawning but a link between yawning and stretching as early as the end of the first prenatal trimester

G. The most extraordinary demonstration of the yawn-stretch linkage occurs in many people paralyzed on one side of their body because of brain damage caused by a stroke. The prominent British neurologist Sir Francis Walshe noted in 1923 that when these hemiplegics yawn, they are startled and mystified to observe that then otherwise paralyzed arm rises and flexes automatically in what neurologists term an "associated response." Yawning apparently activates undamaged, unconsciously controlled connections between the brain and the cord motor system innervating the paralyzed limb. It is not known whether the associated response is a positive prognosis for recovery, nor whether yawning is therapeutic for reinnervation or prevention of muscular atrophy.

H. Clinical neurology offers other surprises. Some patients with "locked-in" syndrome, who are almost totally deprived of the ability to move voluntarily, can yawn normally. The neural circuits for spontaneous yawning must exist in the brain stem near other respiratory and vasomotor centers, because yawning is performed by anencephalic who possess only the medulla oblongata. The multiplicity of stimuli of contagious yawning, by contrast, implicates many higher brain regions.

Questions 28-32

Summary

Complete the Summary paragraph described below. In boxes 28-32 on your answer sheet, write the

correct answer with No MORE THAN THREE WORDS.

A psychology professor drew a conclusion after observation that it takes about she seconds to complete an average yawning which needs .....28.....before a following yawning comes. It is almost at the same frequency that male and female yawn or half, yet behavior accompanied with yawning showing a .....29.....in genders. Some parts within the brain may affect the movement which also have something to do with.....30.....another finding also finds there is a link between yawn and.....31.....before a baby was born, which two can be automatically co-operating even among people whose.....32.....is damaged.

Questions 33-37

Read paragraph A-H. Which paragraph contains the following information? Write the correct letter A-H for question 33-37

NB: You may use any letter more than once.

33 The rate for yawning shows some regular pattern.

34 Yawning is an inherent ability that appears in both animals and humans.

35 Stretching and yawning are not always going together.

36 Yawning may suggest people are having positive notice or response in communicating.

37 Some superior areas in brain may deal with the infectious feature of yawning

Questions 38-40

Do the following statements agree with the information given in Reading Passage 3? ***In boxes 38-40 on your answer sheet, write***

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

38 Several students in Platek's experiment did not comprehend why then tutor ask them to yawn back.

39 Some results from certain experiment indicate the link between yawning and compassion.

40 Yawning can show an affirmative impact on the recovery from brain damage brought by a stroke.

Reading Test 21

Section 1

Consecutive and Simultaneous Translation

A. When people are faced with a foreign-language barrier, the usual way round it is to find someone to interpret or translate for them. The term 'translation', is the neutral term used for all tasks where the meaning or expressions in one language (the source language) is turned into the meaning of another (the 'target' language), whether the medium is spoken, written, or signed. In specific professional contexts, however, a distinction is drawn between people who work with the spoken or signed language (interpreters), and those who work with the written language (translators). There are certain tasks that blur this distinction, as when source speeches turned into target writing. But usually the two roles are seen as quite distinct, and it is unusual to find one person who is equally happy with both occupations. Some writers on translation, indeed, consider the interpreting task to be more suitable for extrovert personalities, and the translating task for introverts

B. Interpreting is today widely known from its use in international political life. When senior ministers from different language backgrounds meet, the television record invariably shows a pair of interpreters hovering in the background. At major conferences, such as the United Nations General Assembly, the presence of headphones is a clear indication that a major linguistic exercise is taking place. In everyday circumstances, too, interpreters are frequently needed, especially in cosmopolitan societies formed by new reiterations of immigrants and Gastarbeiter. Often, the business of law courts, hospitals, local health clinics, classrooms, or industrial tribunals cannot be carried on without the presence of an interpreter. Given the importance and frequency of this task, therefore, it is remarkable that so little study has been made of what actually happens when interpreting takes place, and of how successful an exercise it is.

C. There are two main kinds of oral translation consecutive and. In consecutive translation the translating starts after the original speech or some part of it has been completed. Here the interpreter's strategy and the final results depend, to a great extent on the length of the segment to be translated. If the segment is just a sentence or two the interpreter closely follows the original speech. As often as not, however, the interpreter is expected to translate a long speech which has lasted for scores of minutes or even longer. In this case he has to remember a great number of messages; and keep them in mind until he begins his translation. To make this possible the interpreter has to take notes of the original messages, various systems of notation having been suggested for the purpose. The study of, and practice in, such notation is the integral part of the interpreter's training as are special exercises to develop his memory.

D. Doubtless the **recency** of developments in the field partly explains this neglect. One procedure, consecutive interpreting, is very old — and presumably dates from the Tower of Babel! Here, the interpreter translates after the speaker has finished speaking. This approach is widely practiced in informal situations, as well as in committees and small conferences. In larger and more formal settings, however, it has been generally replaced by simultaneous interpreting — a recent development that arose from the availability of modem audiological equipment and the advent of increased international interaction following the Second World War.

E. Of the two procedures, it is the second that has attracted most interest, because of the complexity of the task and the remarkable skills required. In no other context of human communication is anyone routinely required to listen and speak at the same time, preserving an exact semantic correspondence between the two modes. Moreover, there is invariably a delay of a few words between the stimulus and the response, because of the time it takes to assimilate what is being said in the source language and to translate it into an acceptable form in the target language. This 'ear-voice span' is usually about 2 or 3 seconds, but it may be as much as 10 seconds or so, if the text is complex. The brain has to remember what has just been said, attend to what is currently being said, and anticipate the construction of what is about to be said. As you start a sentence you are taking a leap in the dark, you are mortgaging your grammatical future; the original sentence may suddenly be turned in such a way that your translation of its end cannot easily be reconciled with your translation of its start. Great is called for

F. How it is all done is not at all clear. That it is done at all is a source of some wonder, given the often lengthy periods of interpreting required, the confined environment of an interpreting booth, the presence of background noise, and the awareness that major decisions may depend upon the accuracy of the work. Other consideration such as cultural background also makes it aim to pay full attention to the backgrounds of the authors and the recipients, and to take into account differences between source and target language.

G. Research projects have now begun to look at these factors - to determine, for example, how far successful interpreting is affected by poor listening conditions, or the speed at which the source language is spoken. It seems that an input speed of between 100 and 120 words per minute is a comfortable rate for interpreting, with an upper limit of around 200 w.p.m. But even small increases in speed can dramatically affect the accuracy of output. In one controlled study, when speeds were gradually increased in a series of stages from 95 to 164 w.p.m., the ear-voice span also

increased with each stage, and the amount correctly interpreted showed a clear decline. Also, as the translating load increases, not only are there more errors of commission (mistranslations, cases of vagueness replacing precision), there are also more errors of omission, as words and segments of meaning are filtered out. These are important findings, given the need for accuracy in international communication. What is needed is a more detailed identification of the problem areas, and of the strategies speakers, listeners, and interpreters use to solve them. There is urgent need to expand what has so far been one of the most neglected fields of communication research.

Questions 1-5

*Choose the correct letter, A, **B, c** or **D.***

Write your answers in boxes 1-5 on your answer sheet.

1. ***In which way*** does author state translation at the ***beginning of the passage***?

A. abstract and concrete meaning

B. general and specific meaning

C. several examples of translation's meaning

D. different meaning in various profession

2. Application of headphone in a UN conference tells US that:

A. TV show is being conducted

B. radio program is on the air

C. two sides are debating

D. language practice is in the process

3. In the passage, **what is author's purpose** of citing ***Tower of Babel***

A. interpreting secret is stored in the Tower

B. interpreter emerged exactly from time of Tower of Babel

C. consecutive interpreting has a long history

D. consecutive interpreting should be abandoned

4. About **simultaneous interpreting,** which of the following is ***TRUE!***

A. it is an old and disposable interpretation method

B. it **doesn't** need outstanding professional ability

C. it relies on professional equipment

D. it takes less than two seconds ear-voice span

5. In **consecutive translation,** if the section is longer than expected, what would an interpreter most probably do?

A. he or she has to remember some parts ahead
B. he or she has to break them down first
C. he or she has to respond as quickly as possible
D. he or she has to remember all parts ahead

Questions 6-9

Summary

*Complete the following summary of the paragraphs of Reading Passage, using **no more than two** words or **a number** from the Reading Passage for each answer. Write your answers in boxes 6-9 on your answer sheet.*

The cycle from ear to voice normally lasts about.....6....., which depends on sophistication of paper, for example, it could go up to.....7.....sometimes. When expert took close research on affecting elements, they found appropriate speaking speed is somehow among.....8.....w.p.m. In a specific experiment, the accuracy of interpretation dropped while the ear-voice span speed increased between 95 to 164 w.p.m. However, the maximum of speed was about.....9.....w.p.m.

Questions 10-13

Choose FOUR correct letters

Write your answers in boxes 10-13 on your answer sheet.

*Which **FOUR** of the followings are the factors that affect interpreting?*

A. mastery in structure and grammar of sentence in the script

B. speed of incoming sound source

C. noisy of background

D. emotional states of interpreter

E. culture of different backgrounds

F. understanding the significance of being precise

G. upper volume limit of speakers

Section 2

Water Filter

A. An ingenious invention is set to bring clean water to the third world, and while the science may be cutting edge, the materials are extremely down to earth. A handful of clay yesterday's coffee grounds and some cow manure are the ingredients that could bring clean, safe drinking water to much of the third world.

B. The simple new technology, developed by ANU materials scientist Mr. Tony Flynn, allows water filters to be made from commonly available materials and fired on the ground using cow manure as the source of heat, without the need for a kiln. The filters have been tested and shown to remove common pathogens (disease-producing organisms) including E-coli. Unlike other water filtering devices, the filters are simple and inexpensive to make. "They are very simple to explain and

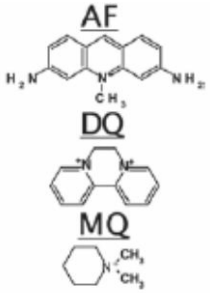
demonstrate and can be made by anyone, anywhere," says Mr. Flynn. "They don't require any western technology. All you need is terracotta clay, a compliant cow and a match."

C. The production of the filters is extremely simple. Take a handful of dry, crushed clay, mix it with a handful of organic material, such as used tea leaves, coffee grounds or rice **hulls**, add enough water to make a stiff biscuit-like mixture and form a cylindrical pot that has one end closed, then dry it in the sun. According to Mr. Flynn, used coffee grounds have given the best results to date. Next, surround the pots with straw; put them in a mound of cow manure, light the straw and then top up the burning manure as required. In less than 60 minutes the filters are finished. The walls of the finished pot should be about as thick as an adult's index. The properties of cow manure are vital as the fuel can reach a temperature of 700 degrees in half an hour and will be up to 950 degrees after another 20 to 30 minutes. The manure makes a good fuel because it is very high in organic material that bums readily and quickly; the manure has to be dry and is best used exactly as found in the field, there is no need to break it up or process it any further.

D. "A potter's din is an expensive item and can could take up to four or five hours to get upto 800 degrees. It needs expensive or scarce fuel, such as gas or wood to heat it and experience to run it. With no technology, no insulation and nothing other than a pile of cow manure and a match, none of these restrictions apply," Mr. Flynn says.

E. It is also helpful that, like terracotta clay and organic material, cow dung is freely available across the developing world. "A cow is a natural fuel factory. My understanding is that cow dung as a fuel would be pretty much the same wherever you would find it." Just as using manure as a fuel for domestic uses is not a new idea, the porosity of clay is something that potters have known about for years, and something that as a former ceramics lecturer in the ANU School of Art, Mr. Flynn is well aware of. The difference is that rather than viewing the porous nature of the material as a problem — after all not many people want a pot that won't hold water — his filters capitalize on this property.

F. Other commercial ceramic filters do exist, but, even if available, with prices starting at US$5 each, they are often outside the budgets of most people in the developing world. The filtration process is simple, but effective. The basic principle is that there are passages through the filter that are wide enough for water droplets to pass through, but too narrow for pathogens. Tests with the deadly E-coli bacterium have seen the filters remove 96.4 to 99.8 per cent of the pathogen — well within safe levels. Using only one filter it takes two hours to filter a litre of water. The use of organic material, which burns away after firing, helps produce the structure in which pathogens will become trapped. It overcomes the potential problems of finer clays that may not let water through and also means that cracks are soon halted. And like clay and cow dung, it is universally available.



G. The invention was born out of a World Vision project involving the Manatuto community in East Timor The charity wanted to help set up a small industry manufacturing water filters, but initial research found the local clay to be too fine — a problem solved by the addition of organic material. While the AF problems of producing a working ceramic filter in East Timor were overcome, the solution was kiln-based and particular to that community's materials and couldn't be applied elsewhere. Manure firing, with no requirement for a kiln, has made this zero technology approach available anywhere it is needed. With all the components being widely available, Mr. Flynn says there is no reason the technology couldn't be applied throughout the developing world, and with no plans to patent his idea, there will be no legal obstacles to it being adopted in any community that needs it. "Everyone has a right to clean water, these filters have the potential to enable anyone in the world to drink water safely," says Mr. Flynn.

Questions 14-19

Complete the flow chart, using NO MORE THAN TWO WORDS from the Reading Passage for each answer. Write your answers in boxes 14-19 on your answer sheet.

Guide to Making Water Filters

Step one: combination of 14.....and organic material, with sufficient 15.....to create a thick mixture sun dried

Step two: pack 16.....around the cylinders place them in 17.....which is as burning fuel for firing (maximum temperature: 18.....) filter being baked in under 19.....

Questions 20-23

Do the following statements agree with the information given in Reading Passage 2? In boxes 20-23 on your answer sheet, write

TRUE if the statement is true

FALSE if the statement is false

NOT GIVEN if the information is not given in the passage

---

20 It takes half an hour for the manure to reach 950 degrees.

21 Clay was initially found to be unsuitable for pot making.

22 Coffee grounds are twice as effective as other materials.

23 E-coli is the most difficult bacteria to combat.

Questions 24-26

*Choose the correct letter, A, B, **c** or D.*

Write your answers in boxes 24-26 on your answer sheet.

24 When making the pot, the thickness of the wall

A. is large enough to let the pathogens to pass.

B. varied according to the temperature of the fuel,

C. should be the same as an adult's forefinger.

D. is not mentioned by Mr. Flynn.

25 what is true about *the charity, it*

A. failed in searching the appropriate materials.

B. successfully manufacture a kiln based ceramic filter to be sold worldwide

C. found that the local clay are good enough.

D. intended to help build a local filter production factory.

26 Mr. Flynn's design is purposely not being patented

A. because he hopes it can be freely used around the world.

B. because he doesn't think the technology is perfect enough,

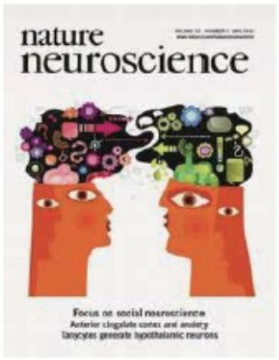
C. because there are some legal obstacles.

D. because the design has already been applied thoroughly.

Section 3

Music: Language We All Speak

Section A: Music is one of the human specie's relatively few universal abilities. Without formal training, any individual, from Stone Age tribesman to suburban teenager has the ability to recognize music and, in some fashion, to make it. Why this should be so is a mystery. After all, music isn't necessary for getting through the day, and if it aids in reproduction, it does so only in highly indirect ways. Language, by contrast, is also everywhere- but for reasons that are more obvious. With language, you and the members of your tribe can organize a migration across Africa, build reed boats and cross the seas, and communicate at night even when you can't see each other. Modem culture, in all its technological extravagance, springs directly from the human talent for manipulating symbols and syntax. Scientists have always been intrigued by the connection between music and language. Yet over the years, words and melody have acquired a vastly different status in the lab and the seminar room. While language has long been considered essential to unlocking the mechanisms of human intelligence, music is generally treated as an evolutionary frippery - mere"auditory cheesecake," as the Harvard cognitive scientist Steven Pinker puts it.



Section B: But thanks to a decade-long wave of neuroscience research, that tune is changing. A flurry of recent publications suggests that language and music may equally be able to tell **US** who we are and where we're from - not just emotionally, but biologically. In July, the journal *Nature Neuroscience* devoted a special issue to the topic. And in an article in the August 6 issue of the *Journal of Neuroscience,* David Schwartz, Catherine Howe, and Dale Purves of Duke University argued that the sounds of music and the sounds of language are intricately connected.

To grasp the originality of this idea, it's necessary to realize two things about how music has traditionally been understood. First, musicologists have long emphasized that while each culture stamps a special identity onto its music; music itself has some universal qualities. For example, in virtually all cultures sound is divided into some or all of the 12

intervals that make up the chromatic scale - that is, the scale represented by the keys on a piano. For centuries, observers have attributed this preference for certain combinations of tones to the mathematical properties of sound itself. Some 2,500 years ago, Pythagoras was the first to note a direct relationship between the harmoniousness of a tone combination and the physical dimensions of the object that produced it. For example, a plucked string will always play an octave lower than a similar string half its size, and a fifth lower than a similar string two-thirds its length. This link between simple ratios and harmony has influenced music theory ever since.

Section C: This music-is-moth idea is often accompanied by the notion that music formally speaking at least, exists apart from the world in which it was created. Writing recently in *The New York Review of Books,* pianist and critic Charles Rosen discussed the long-standing notion that while painting and sculpture reproduce at least some aspects of the natural world, and writing describes thoughts and feelings we are all familiar with, music is entirely abstracted from the world in which we live. Neither idea is right, according to David Schwartz and his colleagues. Human musical preferences are fundamentally shaped not by elegant algorithms or ratios but by the messy sounds of real life, and of speech in particular -which in turn is shaped by our evolutionary heritage." The explanation of music, like the explanation of any product of the mind, must be rooted in biology, not in numbers per se," says Schwartz.

Schwartz, Howe, and Purves analyzed a vast selection of speech sounds from a variety of languages to reveal the underlying patterns common to all utterances. In order to focus only on the raw sound, they discarded all theories about speech and meaning and sliced sentences into random bites. Using a database of over 100,000 brief segments of speech, they noted which frequency had the greatest emphasis in each sound. The resulting set of frequencies, they discovered, corresponded closely to the chromatic scale. In short, the building blocks of music are to be found in speech

Far from being abstract, music presents a strange analog to the patterns created by the sounds of speech. "Music, like the visual arts, is rooted in our experience of the natural world," says Schwartz.

" It emulates our sound environment in the way that visual arts emulate the visual environment. " In music we hear the echo of our basic sound-making instrument- the vocal tract. The explanation for human music is simple; still than Pythagoras's mathematical equations. We like the sounds that are familiar to us-specifically, we like sounds that remind us of us**.**

This brings up some chicken-or-egg evolutionary questions. It may be that music imitates speech directly, the researchers say, in which case it would seem that language evolved first. It's also conceivable that music came first and language is in effect an

Imitation of song - that in everyday speech we hit the musical notes we especially like. Alternately, it may be that music imitates the general products of the human sound-making system, which just happens to be mostly speech. "We can't know this," says Schwartz. "What we do know is that they both come from the same system, and it is this that shapes our preferences."

Section D: Schwartz's study also casts light on the long-running question of whether animals understand or appreciate music. Despite the apparent abundance of "music" in the natural world- ***birdsong*****,** ***whalesong***, wolf howls, synchronized chimpanzee hooting previous studies have found that many laboratory animals don't show a great affinity for the human variety of music making. Marc Hauser and Josh McDermott of Harvard argued in the July issue of *Nature Neuroscience* that animals don't create or perceive music the way we do. The act that laboratory monkeys can show recognition of human tunes is evidence, they say, of shared general features of the auditory system, not any specific chimpanzee musical ability. As for birds, those most musical beasts, they generally recognize their own tunes - a narrow repertoire - but don't generate novel melodies like we do. There are no avian Mozarts.

But what's been played to the animals, Schwartz notes, is human music. If animals evolve preferences for sound as we do - based upon the soundscape in which they live -then their "music" would be fundamentally different from ours. In the same way our scales derive from human utterances, a cat's idea of a good tune would derive from yowls and meows. To demonstrate that animals don't appreciate sounds the way we do, we'd need evidence that they don't respond to "music" constructed from their own sound environment.

Section E: No matter how the connection between language and music is parsed, what is apparent is that our sense of music, even our love for it, is as deeply rooted in our biology and in our brains as language is. This is most obvious with babies, says Sandra Trehub at the University of Toronto, who also published a paper in the *Nature Neuroscience* special issue.

For babies, music and speech are on a continuum. Mothers use musical speech to "regulate infants' emotional states." Trehub says. Regardless of what language they speak, the voice all mothers use with babies is the same: "something between speech and song." This kind of communication "puts the baby in a trance-like state, which may proceed to sleep or extended periods of rapture." So if the babies of the world could understand the latest research on language and music, they probably

wouldn't be very surprised. The upshot, says Trehub, is that music may be even more of a necessity than we realize.

Questions 27-31

Reading Passage 3 has five sections A-E.

Choose the correct heading for each section from the of headings below.

	List of Headings
i	Animal sometimes make music.
ii	Recent research on music
iii	Culture embedded in music
iv	Historical theories review
v	Communication in music with animals
vi	Contrast between music and language
vii	Questions on a biological link with human and music
viii	Music is good for babies.

Write the correct number i-viii in boxes 27-31 on your answer sheet.

27 Section A

28 Section B

29 Section C

30 Section D

31 Section E

Questions 32-38

Look at the following people and list of statements below.

Match each person with the correct statement.

Write the correct letter A-Gin boxes 32-38 on your answer sheet.

List of Statements

A Music exists outside of the world in which it is created.

B Music has a common feature though cultural influences affect

c Humans need music.

D Music priority connects to the disordered sound around.

E Discovery of mathematical musical foundation.

F Music is not treated equally well compared with language

G Humans and monkeys have similar traits in perceiving sound.

---

32 Steven Pinker

33 Musicologists

34 Greek philosopher Pythagoras

35 Schwartz, Howe, and Purves

36 Marc Hauser and Josh McDermott

37 Charles Rosen

38 Sandra Trehub

Questions 39-40

*Choose the correct letter **A,** B, **c** or D*

Write your answers in boxes 39-40 on your answer sheet.

39 Why was the study of animal's music uncertain?

A Animals don't have the same auditory system as humans.

B Experiments on animal's music are limited,

C tunes are impossible for animal to make up.

D Animals don't have spontaneous ability for the tests.

40 What is the main subject of this passage?

A Language and psychology.

B Music formation,

C Role of music in human society.

D Music experiments for animals.

Reading Test 22

Section 1

Voyage of going: beyond the blue line 2

A. One feels a certain sympathy for Captain James Cook on the day in 1778 that he "discovered" Hawaii. Then on his third expedition to the Pacific, the British navigator had explored scores of islands across the breadth of the sea, from lush New Zealand to the lonely wastes of Easter Island This latest voyage had taken him thousands of miles north from the Society Islands to an archipelago so remote that even the ok! Polynesians back on Tahiti knew nothing about it. Imagine Cook's surprise, then, when the natives of Hawaii came paddling out in their canoes and greeted him in a familiar tongue, one he had heard on virtually every mote of inhabited land he had visited Marveling at the ubiquity of this Pacific language and culture, he later wondered in his journal: "How shall we account for this Nation spreading it self so far over this Vast ocean?"

B. Answers have been slow in coming. But now a startling archaeological find on the island of Efate, in the Pacific nation of Vanuatu, has revealed an ancient seafaring people, the distant ancestors of today's Polynesians, taking their first steps into the unknown. The discoveries there have also opened a window into the shadowy work! of those early voyagers. At the same time, other pieces of this human puzzle are turning up in unlikely places. Climate data gleaned from slow-growing corals around the Pacific and from sediments in alpine lakes in South America may help explain how, more than a thousand years later, a second wave of seafarers beat their way across the entire Pacific.

C. What we have is a first- or second-generation site containing the graves of some of the Pacific's first explorers," says Spriggs, professor of archaeology at the Australian National University and co-leader of an international team excavating the site. It came to light only by luck A backhoe operator, digging up topsoil on the grounds of a derelict coconut plantation, scraped open a grave—the first of dozens in a burial ground some 3,000 years old It is the oldest cemetery ever found in the Pacific islands, and it harbors the bones of an ancient people archaeologists call the Lapita, a label that derives from a beach in New Caledonia where a landmark cache of their pottery was found in the 1950s. They were daring blue-water adventurers who roved the sea not just as expbrers but also as pioneers, bringing abng everything they would need to build new lives—their families and livestock, taro seedlings and stone tools.

D. Within the span of a few centuries the Lapita stretched the boundaries of their world from the jungle-clad vokanoes of Papua New Guinea to the bneliest coral outliers of Tonga, at feast 2,000 miles eastward in the Pacific. Abng the way they expbred millions of square miles of unknown sea, discovering and cobnizing scores of tropical islands never before seen by human eyes: Vanuatu, New Caledonia, Fiji, Samoa.

E. What little is known or surmised about them has been pieced together from fragments of pottery, animal bones, obsidian flakes, and such oblique sources as comparative linguistics and geochemistry. Although their voyages can be traced back to the northern islands of Papua New Guinea, their language variants of which are still spoken across the Pacific came from Taiwan. And their peculiar style of pottery decoration, created by pressing a carved stamp into the clay, probably had its roots in the northern Philippines. With the discovery of the Lapita cemetery on Efate, the volume of data available to researchers has expanded dramatically. The bones of at feast 62 individuals have been uncovered so far including old men, young women, even babies—and more skeletons are known

to be in the ground Archaeobgists were also thrilled to discover six complete Lapita pots. It's an important find, Spriggs says, for it conclusively identifies the remains as Lapita. "It would be hard for anyone to argue that these aren't Lapita when you have human bones enshrined inside what is unmistakably a Lapita urn."

F. Several lines of evidence also undergird Spriggs's conclusion that this was a community of pioneers making their first voyages into the remote reaches of Oceania. For one thing, the radiocarbon dating of bones and charcoal places them early in the Lapita expansion. For another, the chemical makeup of the obsidian flakes littering the site indicates that the rock wasn't local; instead it was imported from a large island in Papua New Guinea's Bismarck Archipelago, the springboard for the Lapita's thrust into the Pacific. A particularly intriguing clue comes from chemical tests on the teeth of several skeletons. DNA teased from these ancient bones may also help answer one of the most puzzling questions in Pacific anthropobgy: Did all Pacific islanders spring from one source or many? Was there only one outward migration from a single point in Asia, or several from different points? "This represents the best opportunity we've had yet," says Spriggs, "to find out who the Lapita actually were, where they came from, and who their cbsest descendants are today.

G. "There is one stubborn question for which archaeobgy has yet to provide any answers: How did the Lapita accomplish the ancient equivalent of a moon landing, many times over? No one has found one of their canoes or any rigging, which could reveal how the canoes were sailed Nor do the oral histories and traditions of later Polynesians offer any insights, for they segue into myth long before they reach as far back in time as the Lapita." All we can say for certain is that the Lapita had canoes that were capable of ocean voyages, and they had the ability to sail them," says Geoff Irwin, a professor of archaeology at the University of Auckland and an avid yachtsman. Those sailing skills, he says, were developed and passed down over thousands of years by earlier mariners who worked their way through the archipelagoes of the western Pacific making short crossings to islands within sight of each other. Reaching Fiji, as they did a century or so later, meant crossing more than 500 miles of ocean, pressing on day after day into the great blue void of the Pacific. What gave them the courage to launch out on such a risky voyage?

H. The Lapita's thrust into the Pacific was eastward, against the prevailing trade winds, Irwin notes. Those nagging headwinds, he argues, may have been the key to their success. "They could sail out for days into the unknown and reconnoiter, secure in the knowledge that if they didn't find anything, they could turn about and catch a swift ride home on the trade winds. It's what made the whole thing work." Once out there, skilled seafarers would detect abundant leads to follow to land: seabirds and turtles, coconuts and twigs carried out to sea by the tides, and the afternoon pileup of clouds on the horizon that often betokens an island in the distance. Some islands may have broadcast their presence with far less subtlety than a cloud bank. Some of the most violent eruptions anywhere on the planet during the past 10,000 years occurred in Melanesia, which sits nervously in one of the most explosive volcanic regions on Earth. Even less spectacular eruptions would have sent plumes of smoke bilbwing into the stratosphere and rained ash for hundreds of miles. It's possible that the Lapita saw these signs of distant islands and later sailed off in their direction, knowing they would find land For returning explorers, successful or not, the geography of their own archipelagoes provided a safety net to keep them from overshooting their home ports and sailing off into eternity.

I. However they did it, the Lapita spread themselves a third of the way across the Pacific, then called it quits for reasons known only to them. Ahead lay the vast emptiness of the central Pacific, and perhaps they were too thinly stretched to venture farther. They probably never numbered more than a

few thousand in total, and in their rapid migration eastward they encountered hundreds of islands more than 300 in Fiji alone. Still, more than a millennium would pass before the Lapita's descendants, a people we now call the Polynesians, struck out in search of new territory.

Questions 1-7

Do the following statements agree with the information given in Reading Passage 1? *In boxes 1-7 on your answer sheet, write*

YES *if the statement is true*

NO *if the statement is false*

NOT GIVEN *if the information is not given in the passage*

1 Captain cook once expected the Hawaii might speak another language of people from other pacific islands.

2 Captain cook depicted number of cultural aspects of Polynesians in his journal.

3 Professor Spriggs and his research team went to the Efate to try to find the site of ancient cemetery.

4 The Lapita completed a journey of around 2,000 miles in a period less than a centenary.

5 The Lapita were the first inhabitants in many pacific islands.

6 The unknown pots discovered in Efate had once been used for cooking.

7 The um buried in Efate site was plain as it was without any decoration.

Questions 8 -10

Summary

*Complete the following summary of the paragraphs of Reading Passage, using no more than **Two** words from the Reading Passage for each answer. Write your answers in boxes **8-10** on your answer sheet.*

Scientific Evident found in Efate site

Tests show the human remains and the charcoal found in the buried um are from the start of the Lapita period. Yet The .....8..... covering many of the Efate site did not come from that area.

Then examinations carried out on the .....9..... discovered at Efate site reveal that not everyone buried there was a native living in the area. In fact, DNA could identify the Lapita's nearest.....10.....present-days.

Questions 11-13

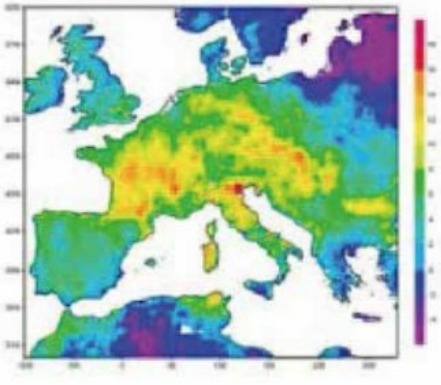
Answer the questions below.

Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the passage for each answer.

11 What did the Lapita travel in when they crossed the oceans?

12 In Irwins's view, what would the Latipa have relied on to bring them fast back to the base?

13 Which sea creatures would have been an indication to the Lapita of where to find land ?



Section 2

European Heat Wave

A. IT WAS the summer, scientists now realise, when felt. We knew that summer 2003 was remarkable: global warming at last made itself unmistakably Britain experienced its record high temperature and continental Europe saw forest fires raging out of control, great rivers drying of a trickle and thousands of heat-related deaths. But just how remarkable is only now becoming clean.

B. The three months of June, July and August were the warmest ever recorded in western and central Europe, with record national highs in Portugal, Germany and Switzerland as well as Britain. And they were the warmest by a very long way Over a great rectangular block of the earth stretching from west of Paris to northern Italy, taking in Switzerland and southern Germany, the average temperature for the summer months was 3.78°c above the long-term norm, said the Climatic Research Unit (CRU) of the University of East Anglia in Norwich, which is one of the world's lending institutions for the monitoring and analysis of temperature records.

C. That excess might not seem a lot until you are aware of the context - but then you realise it is enormous. There is nothing like this in previous data, anywhere. It is considered so exceptional that Professor Phil Jones, the CRU's (Erector, is prepared to say openly - in a way few scientists have done before - that the 2003 extreme may be directly attributed, not to natural climate variability, but to global warming caused by human actions.

D. Meteorologists have hitherto contented themselves with the formula that recent high temperatures are consistent with predictions" of climate change. For the great block of the map - that stretching between 35-50N and 0-20E - the CRU has reliable temperature records dating back to 1781. Using as a baseline the average summer temperature recorded between 1961 andl990, departures from the temperature norm, or "anomalies': over the area as a whole can easily be plotted. As the graph shows, such is the variability of our climate that over the past 200 years, there have been at least half a dozen anomalies, in terms of excess temperature - the peaks on the graph denoting very hot years - approaching, or even exceeding, 20 °c. But there has been nothing remotely like 2003,

when the anomaly is nearly four degrees.

E. "This is quite remarkable," Professor Jones told The Independent. "It's very unusual in a statistical sense. If this series had a normal statistical distribution, you wouldn't get this number. There turn period “how often it could be expected to recur” would be something like one in a thou-sand years. If we look at an excess above the average of nearly four degrees, then perhaps nearly three degrees of that is natural variability, because we’ve seen that in past summers. But the final degree of it is likely to be due to global warming, caused by human actions.

F. The summer of 2003 has, in a sense, been one that climate scientists have long been expecting. Until now, the warming has been manifesting itself mainly in winters that have been less cold than in summers that have been much hotter. Last week, the United Nations predicted that winters were warming so quickly that winter sports would die out in Europe's lower-level ski resorts. But sooner or later the unprecedented hot summer was bound to come, and this year it did.

G. One of the most dramatic features of the summer was the hot nights, especially in the first half of August. In Paris, the temperature never dropped below **230°c (73.40T)** at all between 7 and 14August, and the city recorded its warmest-ever night on 11-12 August, when the mercury did not drop below **25.50°c (77.90°F).** Germany recorded its warmest-ever night at Weinbiet in the Rhine valley with a lowest figure of **27.60°c (80.60T)** on **13** August, and similar record-breaking night-time temperatures were recorded in Switzerland and Italy.

H. The 15,000 excess deaths in France during August, compared with previous years, have been related to the high night-time temperatures. The number gradually increased during the first 12days of the month, peaking at about 2,000 per day on the night of 12-13 August, then fell off dramatically after 14 August when the minimum temperatures fell by about 50C. The elderly were most affected, with a 70 per cent increase in mortality rate in those aged 75-94.

I. For Britain, the year as a whole is likely to be the warmest ever recorded, but despite the high temperature record on 10 August, the summer itself - defined as the June, July and August period - still comes behind 1976 and 1995, when there were longer periods of intense heat. At the moment, the year is on course to be the third-hottest ever in the global temperature record, which goes back to 1856, behind 1998 and 2002 but when all the records for October, November and December are collated, it might move into second place, Professor Jones said. The 10 hottest years in the record have all now occurred since 1990. Professor Jones is in no doubt about the astonishing nature of European summer of 2003.’The temperatures recorded were out of all proportion to the previous record," he said. "It was the warmest summer in the past 500 years and probably way beyond that It was enormously exceptional."

J. His colleagues at the University of East Anglia's Tyndall Centre for Climate Change Research are now planning a special study of it. "It was a summer that has not: been experienced before, either in terms of the temperature extremes that were reached, or the range and diversity of the impacts of the extreme heat," said the centre’s executive director, Professor Mike Hulme. "It will certainly have left its mark on a number of countries, as to how they think and plan for climate change in the future, much as the 2000 floods have revolutionised the way the Government is thinking about flooding in the UK. "The 2003 heat wave will have similar repercussions across Europe."

Questions 14-19

Do the following statements agree with the information given in Reading Passage 2? In boxes 14-

19 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

14 The average summer temperature in 2003 is approximately four degrees higher than that of the past.

15 Jones believes the temperature statistic is within the normal range.

16 Human factor is one of the reasons that caused hot summer.

17 In large city, people usually measure temperature twice a day.

18 Global warming has obvious effect of warmer winter instead of hotter summer before 2003.

19 New ski resorts are to be built on a high-altitude spot.

Questions 20-21

Answer the questions below using NO MORE THAN THREE WORDS AND/OR NUMBERS from the passage for each answer. Write your answers in boxes ***20-21*** *on your answer sheet*

20 What are the two hottest years in Britain besides 2003?

21 What will affect UK government policies besides climate change according to Hulme ?

Questions 22-26

Complete the summary below using NO MORE THAN TWO WORDS from the passage. Write your answers in boxes 22-26 On your answer sheet

In the summer of 2003, thousands of extra death occurred in the country of____22_____. Moreover, world-widely, the third record of hottest summer date from_____23____, after the year of_____24_____. According to Jones, all the 10 hottest years happened from_____25____. However, summer of 2003 was at the peak of previous ____26____years, perhaps even more.

Question 27

Choose the correct letter A, B, c or D

Write your answer in box 27 on your answer sheet

27 Which one can be best served as the title of this passage in the following options?

A Global Warming effect

B Global Warming in Europe

C The Effects of hot temperature

D Hottest summer in Europe

Section 3

the concept of childhood in the western countries

The history of childhood has been a topic of interest in social history since the highly influential 1960 book Centuries of Childhood, written by French historian Aries. He argued that "childhood" is a concept created by modern society.

A. One of the most hotly debated issues in the history of childhood has been whether childhood is itself a recent invention. The historian Philippe Aries argued that in Western Europe during the Middle Ages (up to about the end of the fifteenth century) children were regarded as miniature adults, with all the intellect and personality that this implies. He scrutinized medieval pictures and diaries, and found no distinction between children and adults as they shared similar leisure activities and often the same type of work. Aries, however, pointed out that this is not to suggest that children were neglected, forsaken or despised. The idea of childhood is not to be confused with affection for children; it corresponds to an awareness of the particular nature of childhood, that particular nature which distinguishes the child from the adult, even the young adult.

B. There is a long tradition of the children of the poor playing a functional role in contributing to the family income by working either inside or outside the home. In this sense children are seen as 'useful. Back in the Middle Ages, children as young as 5 or 6 did important chores for their parents and, from the sixteenth century, were often encouraged (or forced) to leave the family by the age of 9 or 10 to work as servants for wealthier families or to be apprenticed to a trade.

C. With industrialization in the eighteenth and nineteenth centuries, a new demand for child labour was created, and many children were forced to work for long hours, in mines, workshops and factories. Social reformers began to question whether labouring long hours from an early age would harm children's growing bodies. They began to recognize the potential of carrying out systematic studies to monitor how far these early deprivations might be affecting children's development.

D. Gradually, the concerns of the reformers began to impact on the working conditions of children. In Britain, the Factory Act of 1833 signified the beginning of legal protection of children from exploitation and was linked to the rise of schools for factory children. The worst forms of child exploitation were gradually eliminated, partly through factory reform but also through the influence of trade unions and economic changes during the nineteenth century which made some forms of child labour redundant. Childhood was increasingly seen as a time for play and education for all children, not just for a privileged minority. Initiating children into work as 'useful' children became less of a priority. As the age for starting full-time work was delayed, so childhood was increasingly understood as a more extended phase of dependency, development and learning. Even so, work continued to play a significant, if less central role in children's lives throughout the later

nineteenth and twentieth century. And the 'useful child' has become a controversial image during the first decade of the twenty-first century especially in the context of global concern about large numbers of the world's children engaged in child labour.

E. The Factory Act of 1833 established half-time schools which allowed children to work and attend school. But in the 1840s, a large proportion of children never went to school, and if they did, they left by the age of 10 or 11. The situation was very different by the end of the nineteenth century in Britain. The school became central to images of 'a normal' childhood .

F. Attending school was no longer a privilege and all children were expected to spend a significant part of their day in a classroom. By going to school, children's lives were now separated from domestic life at home and from the adult world of work. School became an institution dedicated to shaping the minds, behaviour and morals of the young. Education dominated the management of children's waking hours, not just through the hours spent in classrooms but through 'home' work, the growth of 'after school' activities and the importance attached to 'parental involvement.

G. Industrialization, urbanization and mass schooling also set new challenges for those responsible for protecting children's welfare, and promoting their learning. Increasingly, children were being treated as a group with distinctive needs and they were organized into groups according to their age. For example, teachers needed to know what to expect of children in their classrooms, what kinds of instruction were appropriate for different age groups and how best to assess children's progress. They also wanted tools that could enable them to sort and select children according to their abilities and potential.

Questions 28-34

Do the following statements agree with the information given in Reading Passage 3? Write your answers in boxes 28-34 on your answer sheet.

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

28 Aries pointed out that children did different types of work as adults during the Middle Age.

29 During the Middle Age, going to work necessarily means children were unloved indicated by Aries.

30 Scientists think that overworked labour damages the health of young children

31 the rise of trade union majorly contributed to the protection children from exploitation in 19th century

32 By the aid of half-time schools, most children went to school in the mid of 19 century.

33 In 20 century almost all children need to go to school in full time schedule.

34 Nowadays, children's needs were much differentiated and categorised based on how old they are

Question 35-40

Answer the questions below.

Choose NO MORE THAN THREE WORDS from the passage for each answer. Write your answers in boxes 35-40 on your answer sheet.

35 what is the controversial topic arises with the French historian Philippe Ariès's concept

36 what image for children did Aries believed to be like in Western Europe during the Middle Ages

37 what historical event generated the need for great amount child labour to work long time in 18 and 19 century

38 what legal format initiated the protection of children from exploitation in 19th centenary

39 what the activities were more and more regarded as being preferable for almost all children time in 19th centenary

40 where has been the central area for children to spend largily of their day as people's expectation in modern society

Reading Test 23

Section 1

Have Teenagers Always Existed

A. Our ancestor. *Homo erectus,* may not have had culture or even language, but did they have teenagers? That question has been contested in the past few years, with some anthropologists claiming evidence of an adolescent phase in human fossil. This is not merely an academic debate. Humans today are the only animals on Earth to have a teenage phase, yet we have very little idea why. Establishing exactly when adolescence first evolved and finding out what sorts of changes in our bodies and lifestyles it was associated with could help US understand its purpose. Why do we, uniquely' have a growth spurt so late in life?

B. Until recently, the dominant explanation was that physical growth is delayed by our need to grow large brains and to learn all the behavior patterns associated with humanity - speaking, social interaction and so on. While such behaviour is still developing, humans cannot easily fend for themselves, so it is best to stay small and look youthful. That way your parents and other members of the social group are motivated to continue looking after you. What's more, studies of mammals show a strong relationship between brain size and the rate of development, with larger-brained animals taking longer to reach adulthood. Humans are at the far end of this spectrum. If this theory is correct, and the development of large brains accounts for the teenage growth spurt, the origin of adolescence should have been with the evolution of our* own species *(Homo sapiens)* and Neanderthals, starting almost 200,000 years ago. The trouble is, some of the fossil evidence seems to tell a different story.

C. The human fossil record is extremely sparse, and the number of fossilised children minuscule. Nevertheless, in the past few years anthropologists have begun to look at what can be learned of lives of our ancestors from these youngsters, of the most studied is the famous Turkana boy, an almost complete skeleton of *Homo erectus f* 1.6 million years ago found in Kenya in 1984. Accurately assessing how old someone is from their skeleton is a tricky business. Even with a modern human, you can only make a rough estimate based on the developmental stage of teeth and bones and the skeleton's general size.

D. You need as many developmental markers as possible to get an estimate of age. The Turkana's teeth made him 10 or 11 years old. The features of his skeleton put him at 13, but he as tall as a modem 15-year-old. Susan Anton of New York University points to research by Margaret Clegg who studied a collection of 18th- century 19th- century skeletons whose ages at death were known. When she tried to age the skeletons Without checking the records, she found similar discrepancies to those of the Turkana boy. One 10-year-old boy, for example, had a dental age of 9, the skeleton of a 6-year-old but was tall enough to be 11. 'The Turkana kid still has a rounded skull, and needs more growth to reach the adult shape/ Anton adds. She thinks that *Homo erectus* already developed modern

human patterns growth, with a late, if not quite so extreme, adolescent spurt. She believes Turkana boy was just about to enter it.

E. If Anton is right, that theory contradicts the orthodox idea linking late growth with development of a large brain. Anthropologist Steven Leigh from the University of Illinois goes further. He believes the idea of adolescence as catch-up growth does not explain why the growth rate increases so dramatically. He says that many apes have growth spurts in particular body regions that are associated with reaching maturity, and this makes sense because by timing the short but crucial spells of maturation to coincide with the seasons when food is plentiful, they minimise the risk of being without adequate food supplies while growing. What makes humans unique is that the whole skeleton is involved. For Leigh, this is the key.

F. According to his theory, adolescence evolved as an integral part of efficient upright locomotion, as well as to accommodate more complex brains. Fossil evidence suggests that our ancestors first walked on two legs six million years ago. If proficient walking was important for survival, perhaps the teenage growth spurt has very ancient origins. While many anthropologists will consider Leigh's theory a step too far, he is not the only one with new ideas about the evolution of teenagers.

G. Another approach, which has produced a surprising result, relies on the minute analysis of tooth growth. Every nine days or so the growing teeth of both apes and humans acquire ridges on their enamel surface. These are like rings in a tree trunk: the number of them tells you how long the crown of a tooth took to form. Across mammals' the rate at which teeth develop is closely related to how fast the brain grows and the age you mature. Teeth are good indicators of life history because thefr growth is less related to the environment and nutrition than is the growth of the skeleton.

H. A more decisive piece of evidence came last year, when researchers in France and Spain published their findings from a study of Neanderthal teeth. Neanderthals had much faster tooth growth than *erectus* who went before them, and hence, possibly, a shorter childhood. Lead researcher Fernando Ramirez-Rozzi thinks Neanderthals died young-about 25 years old - primarily because of the cold, harsh environment they had to endure in glacial Europe. They evolved to grow up quicker than their immediate ancestors. Neanderthals and *Homo erectus* probably had to reach adulthood fairly quickly, without delaying for an adolescent growth spurt. So it still looks as though we are the original teenagers.

Questions 1-4

Choose the correct letter, Ay By ***c*** *or D.*

Write the correct letter in boxes 1-4 on your answer sheet.

1. In the first paragraph, why does the writer say '*This is not merely an academic debated'?*

A. Anthropologists' theories need to be backed up by practical research.

B. There have been some important misunderstandings among anthropologists.

C. The attitudes of anthropologists towards adolescence are changing.

D. The work of anthropologists could inform our understanding of modem adolescence.

2. What was Susan Anton's opinion of the *Turkana boy?*

A. He would have experienced an adolescent phase had he lived.

B. His skull showed he had already reached adulthood

C. His skeleton and teeth could not be compared to those from a more modem age.

D. He must have grown much faster than others alive at the time.

3. What point does Steven Leigh make?

A. Different parts of the human skeleton develop at different speeds.

B. The growth period of many apes is confined to times when there is enough food.

C. Humans have different rates of development from each other depending on living conditions.

D. The growth phase in most apes lasts longer if more food is available.

4. What can we learn from *a mammal's teeth*?

A. A poor diet will cause them to grow more slowly.

B. They are a better indication of lifestyle than a skeleton

C. Their growing period is difficult to predict accurately.

D. Their speed of growth is directly related to the body's speed of development.

Questions 5-10

Do the following statements agree with the claims of the writer in Reading Passage 1?

In boxes 5-10 on your answer sheet, write

YES *if the statement agrees with the claims of the writer*

NO *if the statement contradicts the claims of the writer*

NOT GIVEN *if it is impossible to say what the writer thinks about this*

5 It is difficult for anthropologists to do research on human fossil because they are so rare.

6 Modem methods mean it is possible to predict the age of a skeleton with accuracy.

7 Susan Anton's conclusion about the Turkana boy reinforces an established idea.

8 Steen Leigh's ideas are likely to be met with disbelief by many anthropologists.

9 Researchers in France and Spain developed a unique method of analyzing teeth.

10 There has been too little research comparing the brains of Homo erectus and Neanderthals.

Questions 11-14

Complete each sentence with the correct ending, A-G, below.

Write the correct letter A-G, in boxesll-14 on your answer sheet.

11 Until recently, delayed growth in humans until adolescence was felt to be due to

12 In her research, Margaret Clegg discovered

13 Steven Leigh thought the existence of adolescence is connected to

14 Research on Neanderthals suggests that they has short lives because of

---

A. inconsistencies between height, skeleton and dental evidence.

B. the fact that human beings walk on two legs,

C. the way teeth grew.

D. a need to be dependent on others foe survival.

E. difficult climatic conditions.

F. increased quantities of food

G. the existence of much larger brains than preciously

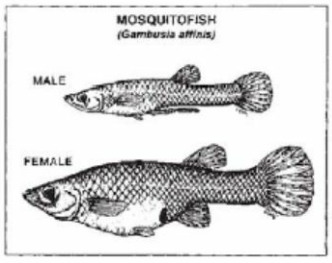
Section 2

You should spend about 20 minutes on Questions 15—27, which are based on Reading Passage 1 below.

Numeracy: can animals tell numbers?

A. Prime among basic numerical faculties is the ability to distinguish between a larger and a smaller number, says psychologist Elizabeth Brannon. Humans can do this with ease - providing the ratio is big enough - but do other animals share this ability? In one experiment, rhesus monkeys and university students examined two sets of geometrical objects that appeared briefly on a computer monitor. They had to decide which set contained more objects. Both groups performed successfully but, importantly, Brannon's team found that monkeys, like humans, make more errors when two sets of objects are close in number. The students' performance ends up looking just like a monkey's. It's practically identical, 'she says.

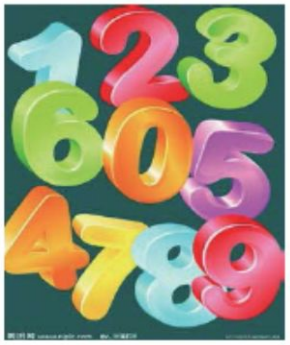
B. Humans and monkeys are mammals, in the animal family known as primates. These are not the only animals whose numerical capacities rely on ratio, however. The same seems to apply to some amphibians. Psychologist Claudia Uller's team tempted salamanders with two sets of fruit flies held in clear tubes. In a series of trials, the researchers noted which tube the salamanders scampered towards, reasoning that if they had a capacity to recognise number, they would head for the larger number. The salamanders successfully discriminated between tubes containing 8 and 16 flies respectively, but not between 3 and 4, 4 and 6, or 8 and 12. So it seems that for the salamanders to discriminate between two numbers, the larger must be at least twice as big as the smaller. However, they could differentiate between 2 and 3 flies just as well as between 1 and 2 flies, suggesting they recognise small numbers in a different way from larger numbers.



C. Further support for this theory comes from studies of mosquitofish, which

instinctively join the biggest shoal they can. A team at the University of Padova found that while mosquitofish can tell the difference between a group containing 3 shoal-mates and a group containing 4, they did not show a preference between groups of 4 and 5. The team also found that mosquitofish can discriminate between numbers up to 16, but only if the ratio between the fish in each shoal was greater than 2:1. This indicates that the fish, like salamanders, possess both the approximate and precise number systems found in more intelligent animals such as infant humans and other primates.

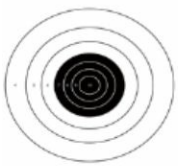
D. While these findings are highly suggestive, some critics argue that the animals might be relying on



other factors to complete the tasks, without considering the number itself. 'Any study that's claiming an animal is capable of representing number should also be controlling for other factors, ' says Brannon. Experiments have confirmed that primates can indeed perform numerical feats without extra clues, but what about the more primitive animals?

E. To consider this possibility, the mosquitofish tests were repeated, this time using varying geometrical shapes in place of fish. The team arranged these shapes so that they had the same overall surface area and luminance even though they contained a different number of objects. Across hundreds of trials on 14 different fish, the team found they consistently discriminated 2 objects from 3. The team is now testing whether mosquitofish can also distinguish 3 geometric objects from 4.

F. Even more primitive organisms may share this ability. Entomologist Jurgen Tautz sent a group of bees down a corridor, at the end of which lay two chambers - one which contained sugar water, which they like, while the other was empty. To test the bees' numeracy, the team marked each chamber with a different number of geometrical shapes - between 2 and 6. The bees quickly learned to match the number of shapes with the correct chamber. Like the salamanders and fish, there was a limit to the bees' mathematical prowess - they could differentiate up to 4 shapes, but failed with 5 or 6 shapes.



G. These studies still do not show whether animals learn to count through training, or whether they are born with the skills already intact. If the latter is true, it would suggest there was a strong evolutionary advantage to a mathematical mind. Proof that this may be the case has emerged from an experiment testing the mathematical ability of three- and four-day-old chicks. Like mosquitofish, chicks prefer to be around as many of their siblings as possible, so they will always head towards a larger number of their kin. If chicks spend their first few days surrounded by certain objects, they become attached to these objects as if they were family. Researchers placed each chick in the middle of a platform and showed it two groups of balls of paper. Next, they hid the two piles behind screens, changed the quantities and revealed them to the chick. This forced the chick to

perform simple computations to decide which side now contained the biggest number of its "brothers'[7]. Without any prior coaching, the chicks scuttled to the larger quantity at a rate well above chance. They were doing some very simple arithmetic, claim the researchers.

H. Why these skills evolved is not hard to imagine, since it would help almost any animal forage for food. Animals on the prowl for sustenance must constantly decide which tree has the most fruit, or which patch of flowers will contain the most nectar. There are also other, less obvious, advantages of numeracy. In one compelling example, researchers in America found that female coots appear to calculate how many eggs they have laid - and add any in the nest laid by an intruder - before making any decisions about adding to them. Exactly how ancient these skills are is difficult to determine, however. Only by studying the numerical abilities of more and more creatures using standardised procedures can we hope to understand the basic preconditions for the evolution of number.

Questions 15-21

Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the passage for each answer. Write your answers in boxes 15-21 on your answer sheet

Answer the table below.

Animal numeracy

Subjects	Experiments	Results
Mammals and birds		
rhesus monkeys and humans	looked at two sets of geometrical objects on computer screen	performance of two groups is almost 15 ……
chicks	chose between two sets of 16…… which are altered	chicks can do calculations in order to choose larger group
coots	behaviour of female birds was observed	bird seems to have ability to 17……
Amphibians, fish and insects		
Salamanders	offered clear tubes containing different quantities of 18 ……	salamanders distinguish between numbers over four if bigger number is at least two times larger
19 ……	shown real shoals and later artificial ones of geometrical shapes; these are used to check influence of total 20……and brightness	subjects know difference between two and three and possibly three and four, but not between four and five
bees	had to learn where 21 …… was stored	could soon choose correct place

Questions 22-27

Do the following statements agree with the information given in Reading Passage 2? In boxes 22-27 on your answer sheet, write

TRUE if the statement true

FALSE if the statement false

NOT GIVEN if the information not given in the passage

22 Primates are better at identifying the larger of two numbers if one is much bigger than the other.

23 Jurgen Tautz trained the insects in his experiment to recognise the shapes of individual numbers.

24 The research involving young chicks took place over two separate days.

25 The experiment with chicks suggests that some numerical ability exists in newborn animals.

26 Researchers have experimented by altering quantities of nectar or fruit available to certain wild animals.

27 When assessing the number of eggs in their nest, coots take into account those of other birds.

Section 3

Elephant communication

Elephant tremors only good for intimate 'chats'

A. A postdoctoral fellow at Stanford University, O'Connell-Rodwell has come to Namibia's premiere wildlife sanctuary to explore the mysterious and complex world of elephant communication. She and her colleagues are part of a scientific revolution that began nearly two decades ago with the stunning revelation that elephants communicate over long distances using low-frequency sounds, also called infrasounds, that are too deep to be heard by most humans.

B. As might be expected, the African elephant's ability to sense seismic sound may begin in the ears. The hammer bone of the elephant's inner ear is proportionally very large for a mammal, but typical for animals that use vibrational signals. It may therefore be a sign that elephants can communicate with seismic sounds. Also, the elephant and its relative the manatee are unique among mammals in having reverted to a reptilian-like cochlear structure in the inner ear. The cochlea of reptiles facilitates a keen sensitivity to idbrations and may do the same in elephants.

C. But other aspects of elephant anatomy also support that ability. First, then enormous bodies, which allow them to generate low-frequency sounds almost as powerful as those of a jet takeoff, provide ideal frames for receiving ground vibrations and conducting them to the inner ear. Second, the elephant's toe bones rest on a fatty pad that might help focus vibrations from the ground into the bone. Finally, the elephant's enormous brain lies in the cranial cavity behind the eyes in line with the auditory canal. The front of the skull is riddled with sinus cavities that may function as resonating chambers for vibrations from the ground.

D. How the elephants sense these vibrations is still unknown, but O'Connell-Rodwell who just earned a graduate degree in entomology at the University of Hawaii at Manoa, suspects the pachyderms are "listening" with then trunks and feet. The trunk may be the most versatile appendage in nature. Its uses include drinking, bathing, smelling, feeding and scratching. Both trunk and feet contain two kinds of pressure-sensitive nerve endings—one that detects infrasonic vibrations and another that responds to vibrations with slightly higher frequencies. For O'Connell-Rodwell, the future of the research is boundless and unpredictable: "Our work is really at the interface of geophysics, neurophysiology and ecology," she says. "We're asking questions that no one has really dealt with before."

E. Scientists have long known that seismic communication is common in small animals, including

spiders, scorpions, insects and a number of vertebrate species such as white-lipped frogs, blind mole rats, kangaroo rats and golden moles. They also have found evidence of seismic sensitivity in elephant seals—2-ton marine mammals that are not related to elephants. But O'Connell-Rodwell was the first to suggest that a large land animal also is sending and receiving seismic messages. O'Connell-Rodwell noticed something about the freezing behavior of Etosha's six-ton bulls that reminded her of the tiny insects back in her lab. "I did my masters thesis on seismic communication in planthoppers," she says. "I'd put a male planthopper on a stem and play back a female call, and the male would do the same thing the elephants were doing: He would freeze, then press down on his legs, go forward a little bit, then freeze again. It was just so fascinating to me, and it's what got me to think, maybe there's something else going on other than acoustic communication."

F. Scientists have determined that an elephant's ability to communicate over long distances is essential for its survival, particularly in a place like Etosha, where more than 2,400 savanna elephants range over an area larger than New Jersey. The difficulty of finding a mate in this vast wilderness is compounded by ... elephant reproductive biology. Females breed only when nestrus a period of sexual arousal that occurs every two years and lasts just a few days. "Females in estrus make these very low, long calls that bulls home in on, because it's such a rare event," O'Connell-Rodwell says. These powerful estrus calls carry more than two miles in the air and may be accompanied by long-distance seismic signals, she adds. Breeding herds also use low-frequency vocalizations to warn of predators. Adult bulls and cows have no enemies, except for humans, but young elephants are susceptible to attacks by lions and hyenas. When a predator appears, older members of the herd emit intense warning calls that prompt the rest of the herd to clump together for protection, then lee. In 1994, O'Connell-Rodwell recorded the dramatic cries of a breeding herd threatened by lions at Mushara. "The elephants got really scared, and the matriarch made these very powerful warning calls, and then the herd took off screaming and trumpeting," she recalls. "Since then, every time we've played that particular call at the water hole, we get the same response the elephants take off."

G. Reacting to a warning call played hi the air is one thing, but could the elephants detect calls transmitted only through the ground? To find out, the research team in 2002 devised an experiment using electronic equipment that allowed them to send signals through the ground at Mushara. The

results of our 2002 study showed **US** that elephants do indeed detect warning calls played through the ground," O'Connell-Rodwell observes. "We expected them to clump up into tight groups and leave the area, and that's in fact what they did. But since we only played back one type of call, we couldn't really say whether they were interpreting it correctly. Maybe they thought it was a vehicle or something strange instead of a predator warning."

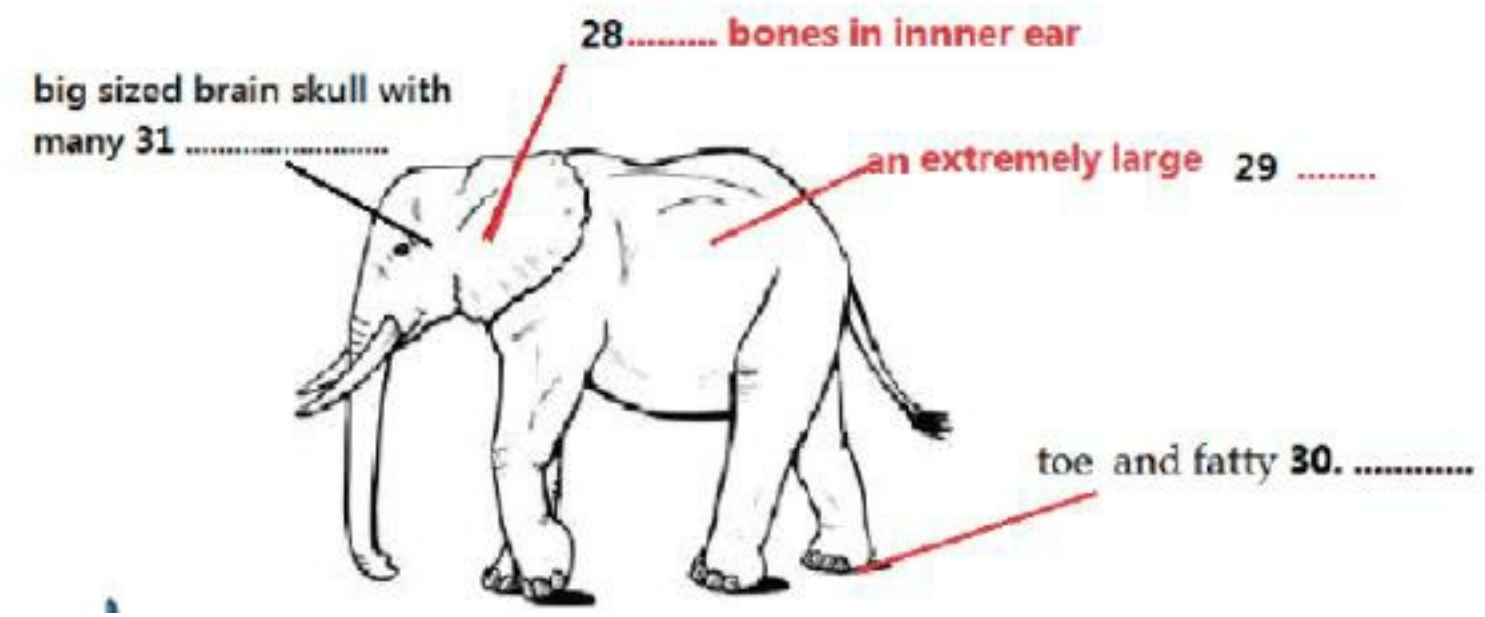
H. An experiment last year was designed to solve that problem by using three different recordings—the 1994 warning call from Mushara, an anti-predator call recorded by scientist Joyce Poole in Kenya and an artificial warble tone. Although still analyzing data from this experiment, O'Connell-Rodwell is able to make a few preliminary observations: "The data I've seen so far suggest that the

elephants were responding like I had expected, when the '94 warning call was played back, they tended to clump together and leave the water hole sooner. But what's really interesting is that the unfamiliar anti-predator call from Kenya also caused them to clump up, get nervous and aggressively rumble—but they didn't necessarily leave. I didn't think it was going to be that clear cut.

Questions 28-31

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 28-31 on your answer sheet.



Question 32-38

Complete the following summary of the paragraphs of Reading Passage, using no more three words or a number from the Reading Passage for each answer. Write your answers in boxes 32-38 on your answer sheet.

How the elephants sense these sound vibrations is still unknown, but O'Connell-Rodwell, a fresh graduate in entomology at the University of Hawaii, proposes that the elephants are "listening" with their 32....., by two kinds of nerve endings—that responds to vibrations with both 33 .....frequency and slightly higher frequencies, o'Connell-Rodwell work is at the combination of geophysics, neurophysiology and 34 .....and it also was the first to indicate that a large land animal also is sending and receiving 35 .....,. O'Connell-Rodwell noticed the freezing behavior by putting a male planthopper communicative approach other than 36……

Scientists have determined that an elephant's ability to communicate over long distances is essential, especially, when elephant herds are finding a 37....., or are warning of predators. Finally, the results of our 2002 study showed US that elephants can detect warning calls played through the

38.....”

Question 39-40

*Choose the correct letter. A, B, **c** or D. Write your answers in boxes 39-40 on your answer sheet.*

39. According the passage, it is determined that an elephant need to communicate over long distances for its survival

A. When a threatening predator appears.

B. When young elephants meet humans.

C. When older members of the herd want to flee from the group.

D. when a male elephant is in estrus.

40. what is the author’s attitude toward the experiment by using three different recordings in the paragraph

A. the outcome is definitely out of the original expectation

B the data can not be very clearly obtained

C. the result can be somewhat undecided or inaccurate

D the result can be unfamiliar to the public

Reading Test 24

Section 1

Ambergris

What is it and where does it come from?

A. Ambergris was used to perfume cosmetics in the days of ancient Mesopotamia and almost every civilization on the earth has a brush with ambergris. Before 1,000 AD, the Chinese names ambergris as lung *sien hiang,* "dragon's spittle perfume," as they think that it was produced from the drooling of dragons sleeping on rocks at the edge of a sea. The Arabs knew ambergris as *anbar,* believing that it is produced from springs near seas. It also gets its name from here. For centuries, this substance has also been used as a flavouring for food.

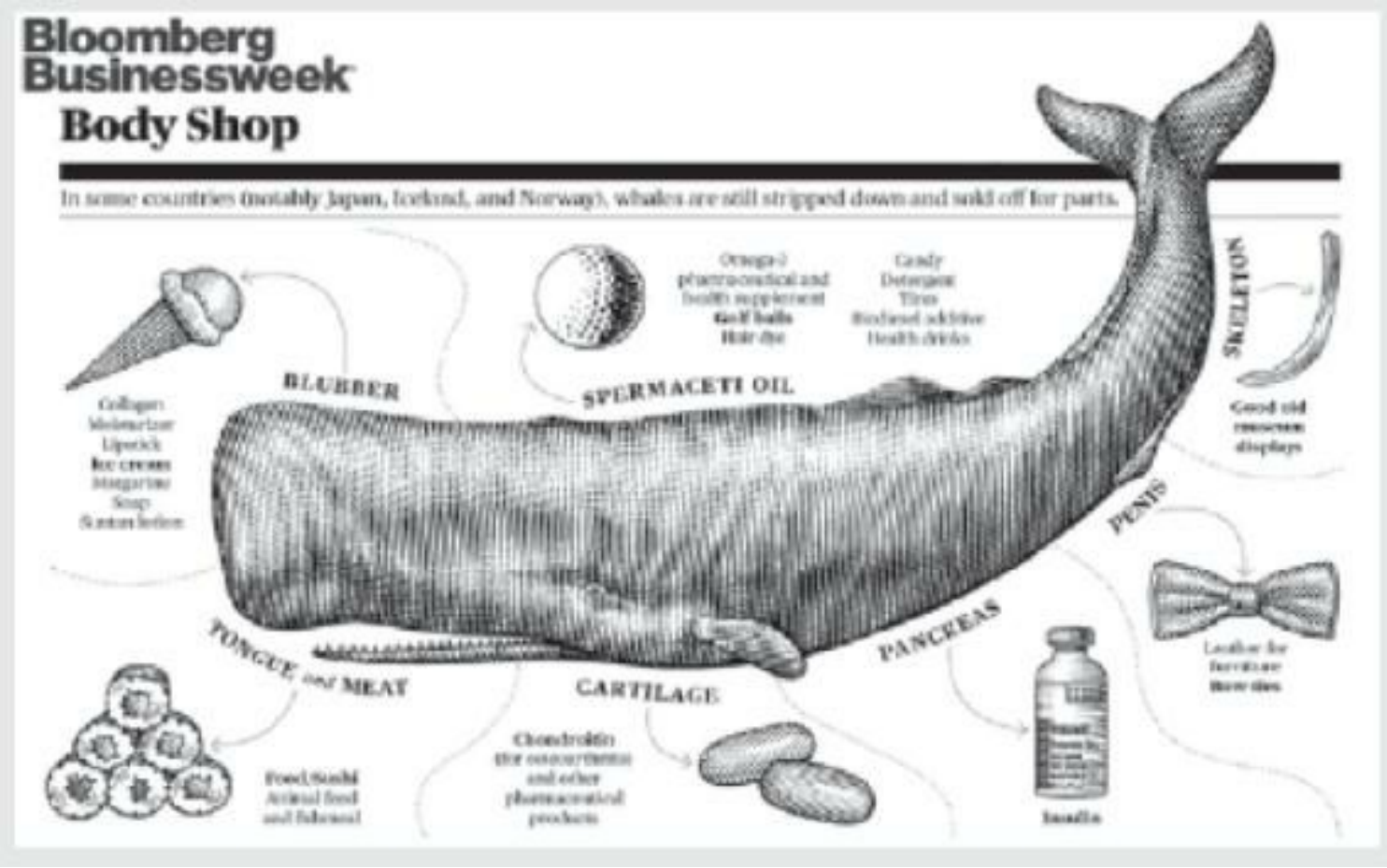
B. During the Middle Ages, Europeans used ambergris as a remedy for headaches, colds, epilepsy, and other ailments. In the 1851 whaling novel Moby-Dick, Herman Melville claimed that ambergris was “largely used in perfumery.” But nobody ever knew where it really came from. Experts were still guessing its origin thousands of years later, until the long ages of guesswork ended in the 1720's, when Nantucket whalers found gobs of the costly material inside the stomachs of sperm whales. Industrial whaling quickly burgeoned. By 20th century ambergris is mainly recovered from inside the carcasses of sperm whales.

C. Through countless ages, people have found pieces of ambergris on sandy beaches. It was named grey amber to distinguish it from golden amber, another rare treasure. Both of them were among the most sought-after substances in the world, almost as valuable as gold. (Ambergris sells for roughly $20 a gram, slightly less than gold at $30 a gram.) Amber floats in salt water, and in old times the origin of both these substances was mysterious. But it turned out that amber and ambergris have little in common. Amber is a fossilized resin from trees that was quite familiar to Europeans long before the discovery of the New World, and prized as jewelry. Although considered a gem, amber is a hard, transparent, wholly-organic material derived from the resin of extinct species of trees, mainly pines.

D. To the earliest Western chroniclers, ambergris was variously thought to come from the same bituminous sea founts as amber, from the sperm of fishes or whales, from the droppings of strange sea birds (probably because of confusion over the included beaks of squid) or from the large hives of bees living near the sea. Marco Polo was the first Western chronicler who correctly attributed ambergris to sperm whales and its vomit.

E. As sperm whales navigate in the oceans, they often dive down to 2 km or more below the sea level to prey on squid, most famously the Giant Squid. It’s commonly accepted that ambergris forms in the whale’s gut or intestines as the creature attempts to "deal" with squid beaks. Sperm whales are rather partial to squid, but seemingly struggle to digest the hard, sharp, parrot-like beaks. It is thought

their stomach juices become hyper-active trying to process the irritants, and eventually hard, resinous lumps are formed around the beaks, and then expelled from their innards by vomiting. When a whale initially vomits up ambergris, it is soft and has a terrible smell. Some marine biologists compare it to the unpleasant smell of cow dung. But after floating on the salty ocean for about a decade, the substance hardens with air and sun into a smooth, waxy, usually rounded piece of nostril heaven. The dung smell is gone, replaced by a sweet, smooth, musky and pleasant earthy aroma.



F. Since ambergris is derived from animals, naturally a question of ethics arises, and in the case of ambergris, it is very important to consider. Sperm whales are an endangered species, whose populations started to decline as far back as the 19th century due to the high demand for their highly emollient oil, and today their stocks still have not recovered. During the 1970's, the Save the Whales movement brought the plight of whales to international recognition. Many people now believe that whales are "saved". This couldn't be further from the truth. All around the world, whaling still exists. Many countries continue to hunt whales, in spite of international treaties to protect them. Many marine researchers are concerned that even the trade in naturally found ambergris can be harmful by creating further incentives to hunt whales for this valuable substance.

G. One of the forms ambergris is used today is as a valuable fixative in perfumes to enhance and prolong the scent. But nowadays, since ambergris is rare and expensive, and big fragrance suppliers that make most of the fragrances on the market today do not deal in it for reasons of cost, availability and murky legal issues, most perfumeries prefer to add a chemical derivative which mimics

the properties of ambergris. As a fragrance consumer, you can assume that there is no natural ambergris in your perfume bottle, unless the company advertises this fact and unless you own vintage fragrances created before the 1980s. If you are wondering if you have been wearing a perfume with this legendary ingredient, you may want to review your scent collection. Here are a few of some of the top ambergris containing perfumes: Givenchy Amarige, Chanel No. 5, and Gucci Guilty.

Questions1-6

Classify the following information as referring to

A. ambergris only

B. amber only

C. both ambergris and amber

D. neither ambergris nor amber

Write the correct letter, A, B, C, or D in boxes 1-6 on your answer sheet.

1 being expensive

2 adds flavor to food

3 used as currency

4 being see-through

5 referred to by Herman Melville

6 produces sweet smell

Questions 7-9

Complete the sentences below with NO MORE THAN ONE WORD from the passage.

Write your answers in boxes 7-9 on your answer sheet.

7 Sperm whales can't digest the _____of the squids.

8 Sperm whales drive the irritants out of their intestines by_____

9 The vomit of sperm whale gradually_____ on contact of air before having pleasant smell.

Questions 10-13

Do the following statements agree with the information given in Reading Passage 1?

*In boxes 10-13 on your answer sheet***,** *write*

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

10 Most ambergris comes from the dead whales today.

11 Ambergris is becoming more expensive than before.

12 Ambergris is still the most frequently used ingredient in perfume production today.

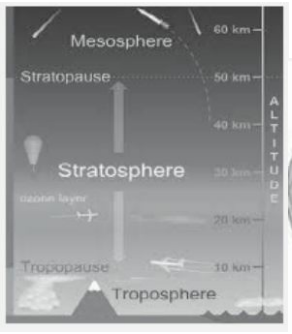
13 New uses of ambergris have been discovered recently.

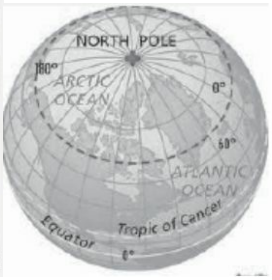
Section 2

Reading Passage 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 below.

global warming: Prevent poles from melting





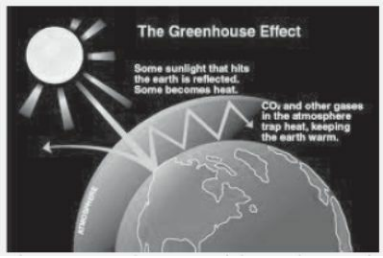
A. Such is our dependence on fossil fuels, and such the volume of carbon dioxide we have already released into the atmosphere, that most climate scientists agree that significant global warming is now inevitable - the best we can hope to do is keep it at a reasonable level, and even that going to be an uphill task. At present, the only serious option on the table for doing this is cutting back on our carbon emissions, but a few countries are making major strides in this regard, the majority are having great difficulty even stemming the rate of increase, let alone reversing Consequently, an increasing number of scientists are beginning to explore the alternatives. They under the banner of geoengineering - generally defined as the intentional large-scale manipulation of the environment.

B. Geoengineering has been shown to work, at least on a small, localised scale, for decades. May Day parades in Moscow have taken place under clear blue skies, aircraft having deposited dry ice, silver iodide (m $1) and cement powder to disperse clouds. Many of the schemes now suggested look to do the opposite, and reduce the amount of sunlight reaching the planet. One scheme focuses on achieving a general cooling of the Earth and involves the concept of releasing aerosol sprays into the stratosphere above the Arctic to create clouds of sulphur dioxide, which would, in turn, lead to a global dimming. The idea is modelled on historical volcanic explosions, such as that of Mount Pinatubo in the Philippines in 1991; which led to a short-term cooling of global temperatures by **0.5°c.** The aerosols could be delivered by artillery, high-flying aircraft or balloons.

C. Instead of concentrating on global cooling, other schemes look specifically at reversing the melting at the poles. One idea is to bolster an ice cap by spraying it with water. Using pumps to carry water from below the sea ice, the spray would come out as snow or ice particles, producing thicker sea ice with a higher albedo (the ratio of sunlight reflected from a surface) to reflect summer radiation. Scientists have also scrutinised whether it is possible to block iceflow in Greenland with cables which have been reinforced, preventing icebergs from moving into

the sea. Veil Albert Kallio, a Finnish scientist, says that such an idea is impractical, because the force of the ice would ultimately snap the cables and rapidly release a large quantity of frozen ice into the sea. However, Kallio believes that the sort of cables used in suspension bridges could potentially be used to divert, rather than halt, the southward movement of ice from Spitsbergen. It would stop the ice moving south, and local currents would see them float northwards' he says.

D. A number of geoengineering ideas are currently being examined in the Russian Arctic. These include planting millions of birch trees: the thinking, according to Kallio, is that their white bark would increase the amount of reflected sunlight. The loss of their leaves in winter would also enable the snow to reflect radiation. In contrast, the native evergreen pines tend to shade the snow and absorb radiation. Using ice-breaking vessels to deliberately break up and scatter coastal sea ice in both Arctic and Antarctic waters in their respective autumns, and diverting Russian rivers to increase cold-water flow to ice-forming areas, could also be used to slow down warming, Kallio says. [1] You would need the wind to blow the right way, but in the right conditions, by letting ice float free and head north, you would enhance ice growth.'


The Greenhouse Effect
Some sunlight that hits the earth is reflected. Some becomes heat.
CO₂ and other gases in the atmosphere trap heat, keeping the earth warm.

E. But will such ideas ever be implemented? The major counter-arguments to geoengineering schemes are, first, that they are a 'cop-out' that allow US to continue living the way we do, rather than reducing carbon emissions; and, second, even if they do work, would the side-effects outweigh the advantages? Then there's the daunting prospect of upkeep and repair of any scheme as well as the consequences of a technical failure. 'I think all of US agree that if we were to end geoengineering on a given day, then the planet would return to its pre-engineered condition very rapidly, and probably within 10 to 20 years' says Dr Phil Rasch, chief scientist for climate change at the US-based Pacific Northwest National Laboratory. That's certainly something to worry about. I would consider geoengineering as a strategy to employ only we manage the conversion to a non-fossil- fuel economy. 'The risk with geoengineering projects is that you can "overshoot"," says Dr Dan hunt, from the University of Bristol. 'You may bring global temperatures back to pre-industrial levels, but the risk is that the poles will still be warmer than they should be and the tropics be cooler than before industrialization.'

F. The main reason why geoengineering is countenanced by the mainstream scientific community is that most researchers have little faith in the of politicians to agree - and then bring in the necessary carbon cuts. Even leading conservation organisations believe the subject worth exploring. As Dr Martin Sommerkorn, a climate change advisor says.' But human-induced climate change has brought humanity to a position where it important not to exclude thinking thoroughly about this topic and its possibilities despite the potential drawbacks. If, over the coming years, the science US about an ever-increased climate sensitivity of the planet and this isn't unrealistic - then we may be best served by not having to start our thinking from scratch.

Questions 14-18

Reading Passage 2 has six paragraphs, A-F

Which paragraph contains the following information?

Write the correct letter, A-F, in boxes 14-18 on your answer sheet You may use any letter more than once.

14 the existence of geoengineering projects distracting from the real task of changing the way we live

15 circumstances in which geoengineering has demonstrated success

16 Frustrating maintenance problems associated with geoengineering projects

17 support for geoengineering being due to a lack of confidence in governments

18 more success in fighting climate change in some parts of the world than others

Questions 19-23

Complete the summary below.

Choose NO MORE THAN TWO WORDS from the passage for each answer. Write your answers in boxes 19-23 on your answer sheet.

Geoengineering projects

A range of geoengineering ideas has been put forward, which aim either to prevent the melting of the ice caps or to stop the general rise in global temperatures. One scheme to discourage the melting of ice and snow involves introducing …….19.....to the Arctic because of their colour. The build-up of ice could be encouraged by dispersing ice along the coasts using special ships and changing the direction of some .....20.....but this scheme is dependent on certain weather conditions. Another way of increasing the amount of ice involves using .....21..... to bring water to the surface. A scheme to stop ice moving would apply.....22.....but this method is more likely to be successful in preventing the ice from travelling in one direction rather than stopping it altogether. A suggestion for cooling global temperatures is based on what has happened in the past after.....23.....and it involves creating clouds of gas.

Questions 24-26

Look at the following people (Questions 24-26) and the list of opinions below. Match each person with the correct opinion, A-E.

Write the correct letter, A-E, in boxes 24-26 on your answer sheet.

24 Phil Rasch

25 DanLunt

26 Martin Sommerkorn

List of opinions

A. The problems of geoengineering shouldn't mean that ideas are not seriously considered.

B. Some geoengineering projects are more likely to succeed than others,

C. Geoengineering only offers a short-term relief.

D. A positive outcome of geoengineering may have a negative consequence elsewhere.

E. Most geoengineering projects aren't clear in what they are aiming at.

Section 3

Sunset for the Oil Business

The world is about to run out of oil. Or perhaps not. It depends whom you believe...

A. Members of the Department Analysis Centre (ODAC) recently met in London and presented technical data that support their grim forecast that the world is perilously close to running out of oil. Leading lights of this moment, including the geologists Colin Campbell, rejected rival views presented by American geological survey and the international energy agency that contradicted their findings. Dr. Campbell even decried the amazing display of ignorance, denial and obfuscation by government, industry and academics on this topic.

B. So is the oil really running out? The answer is easy: Yes. Nobody seriously disputes the notion that oil is, for all practical purposes, a non-renewable resource that will run out some day, be that years or decades away. The harder question is determining when precisely oil will begin to get scarce. And answering that question involves scaling Hubbert's peak.

C. M. King Hubbert, a Shell geologist of legendary status among depletion experts, forecast in 1956 that oil production in the United States would peak in the early 1970s and then slowly decline, in something resembling a bell-shaped curve. At the time, his forecast was controversial, and many rubbished it. After 1970, however, empirical evidence proved him correct: oil production in America did indeed peak and has been in decline ever since.

D. Dr Hubbert's analysis drew on the observation that oil production in a new area typically rises quickly at first, as the easiest and cheapest reserves are tapped. Over time, reservoirs age and go into decline, and so lifting oil becomes more expensive. Oil from that area then becomes less competitive in relation to other fuels, or to oil from other areas. As a result, production slows down and usually tapers off and declines. That, he argued, made for a bell-shaped curve.

E. His successful prediction has emboldened a new generation of geologists to apply his methodology on a global scale. Chief among them are the experts at ODAC, who worry that the global peak in production will come in the next decade. Dr Campbell used to argue that the peak should have come already; he now thinks it is just round the comer. A heavyweight has now joined this gloomy chorus. Kenneth Deffeyes of Princeton University argues in a lively new book ("The View from Hubbert's Peak") that global oil production could peak as soon as 2004.

F. That sharply contradicts mainstream thinking. America's Geological Survey prepared an exhaustive study of oil depletion last year (in part to rebut Dr Campbell's arguments) that put the peak of production some decades off. The IEA has just weighed in with its new "World Energy Outlook", which foresees enough oil to comfortably meet demand to 2020 from remaining reserves. René Dahan, one of ExxonMobil's top managers, goes further: with an assurance characteristic of the world's largest energy company, he insists that the world will be awash in oil for another 70 years.

G. Who is right? In making sense of these wildly opposing views, it is useful to look back at the

pitiful history of oil forecasting. Doomsters have been predicting dry wells since the 1970s, but so far the oil is still gushing. Nearly all the predictions for 2000 made after the 1970s oil shocks were far too pessimistic. America's Department of Energy thought that oil would reach $150 a barrel (at 2000 prices); even Exxon predicted a price of $100.

H. Michael Lynch of DRI-WEFA, an economic consultancy, is one of the few oil forecasters who has got things generally right. In a new paper, Dr Lynch analyses those historical forecasts. He finds evidence of both bias and recurring errors, which suggests that methodological mistakes (rather than just poor data) were the problem. In particular, he faults forecasters who used Hubbert-style analysis for relying on fixed estimates of how much "ultimately recoverable" oil there really is below ground, in the industry's jargon: that figure, he insists, is actually a dynamic one, as improvements in infrastructure, knowledge and technology raise the amount of oil which is recoverable.

I. That points to what will probably determine whether the pessimists or the optimists are right: technological innovation. The first camp tends to be **dismissive** of claims of forthcoming technological revolutions in such areas as deep-water drilling and enhanced recovery. Dr Deffeyes captures this end-of-technology mindset well. He argues that because the industry has already spent billions on technology development, it makes it difficult to ask today for new technology, as most of the wheels have already been invented.

J. Yet techno-optimists argue that the technological revolution in oil has only just begun. Average recovery rates (how much of the known oil in a reservoir can actually be brought to the surface) are still only around 30-35%. Industry optimists believe that new techniques on the drawing board today could lift that figure to 50-60% within a decade.

K. Given the industry's astonishing track record of innovation, it may be foolish to bet against it. That is the result of adversity: the nationalisations of the 1970s forced Big Oil to develop reserves in expensive, inaccessible places such as the North Sea and Alaska, undermining Dr Hubbert's assumption that cheap reserves are developed first. The resulting upstream investments have driven down the cost of finding and developing wells over the last two decades from over $20 a barrel to around $6 a barrel. The cost of producing oil has fallen by half, to under $4 a barrel.

L. Such miracles will not come cheap, however, since much of the world's oil is now produced in ageing fields that are rapidly declining. The IEA concludes that global oil production need not peak in the next two decades if the necessary investments are made. So how much is necessary? If oil companies are to replace the output lost at those ageing fields and meet the world's ever-rising demand for oil, the agency reckons they must invest $1 trillion in non-OPEC countries over the next decade alone. That's quite a figure.

Question 27-31

Do the following statements agree with the claims of the writer in Reading Passage 3 In boxes 27-31 on your answer sheet, write

YES	*if the statement agrees with the information*
NO	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

27 Hubbert has a high-profile reputation amongst ODAC members.

28 Oil is likely to last longer than some other energy sources.

29 The majority of geologists believe that oil will start to run out some time this decade.

30 Over 50 percent of the oil we know about is currently being recovered.

31 History has shown that some of Hubbet's principles were mistaken.

Question 32-35

Complete the notes below

Choose ONE WORD ONLYfrom the passage for each answer.

Write your answers in boxes 32-35 on your answer sheet.

Many people believed Hubbert's theory was 32_____when it was originally presented.

The recovery of the oil gets more 34_____as the reservoir gets older

Questions 36-40

Look at the following statements (questions 36-40) and the of people below.

Match each statement with correct person, A-E.

Write the correct letter, A-E in boxes 36-40 on your answer sheet.

NB: You may use any letter more than once.

36 has found fault in geological research procedure

37 has provided the longest-range forecast regarding oil supply

38 has convinced others that oil production will follow a particular model

39 has accused fellow scientists of refusing to see the truth

40 has expressed doubt over whether improved methods of extracting oil are possible.

List of People

A Colin Campbell

B M. King Hubbert

c Kenneth Deffeyes

D Rene Dahan

E Michael Lynch

Reading Test 25

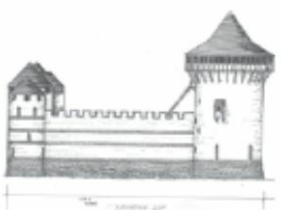
Section 1

Build a Medieval Castle

A. Michel Guyot, owner and restorer of Saint Fargeau castle in France, first had the idea of building a 13th-century style fortress following the discovery that the 15th-century red bricks of his castle obscured the stone walls of a much older stronghold. His dream was to build a castle just as it would have been in the Middle Ages, an â ttp://w«bo.com/iclti9 idea which some found mildly amusing and others dismissed as outright folly. However, Maryline Martin - project director - was inspired by the exciting potential for the venture to regenerate the region. It took several months to bring together and mobilise all the various different partners: architects, archaeologists and financial backers. A site in the heart of Guédelon forest was found: a site which offered not only all the resources required for building a castle - a stone quarry, an oak forest and a water supply - but in sufficient quantities to satisfy the demands of this gigantic site. The first team started work and on June 20th 1997 the first stone was laid.

B. Unlike any other present-day building site, Michel Guyot's purpose is clear, he warmly welcomes members of the public to participate. The workers' role is to demonstrate and explain, to a wide audience, the skills of our forefathers. Stone quarrying, the building of vaulted ceilings, the blacksmith's work and the raising of roof timbers are just some of the activities which visitors can witness during a visit to Guédelon. The workers are always on hand to talk about their craft and the progress of the castle. Each year 60,000 children visit Guédelon with their schools. The site is an excellent educational resource, bringing to life the history of the Middle Ages. Guided tours are tailored to the school curriculum and according to age groups: activity trails for primary school children and interactive guided tours for secondary school children. Pupils of all ages have the opportunity to follow in the footsteps of medieval stonemasons by taking part in a stonecarving workshop or discover the secrets of the medieval master-builders at the geometry workshop.

A. Workers in the Burgundy region of France are building a 13th century castle. They're not restoring an old castle. They're actually building a new old castle. See the builders are constructing it from



scratch. The craftsmen have been working for nearly ten years now but they're not even halfway done yet. That's because they're using only medieval tools and techniques. The World's Gerry Hadden takes US to the site of what will be the Guedelon Castle. Another reason said by Jean Francois, a member of Guedelon stone cutter's guild, for eight hours a day he bangs on a 13th century

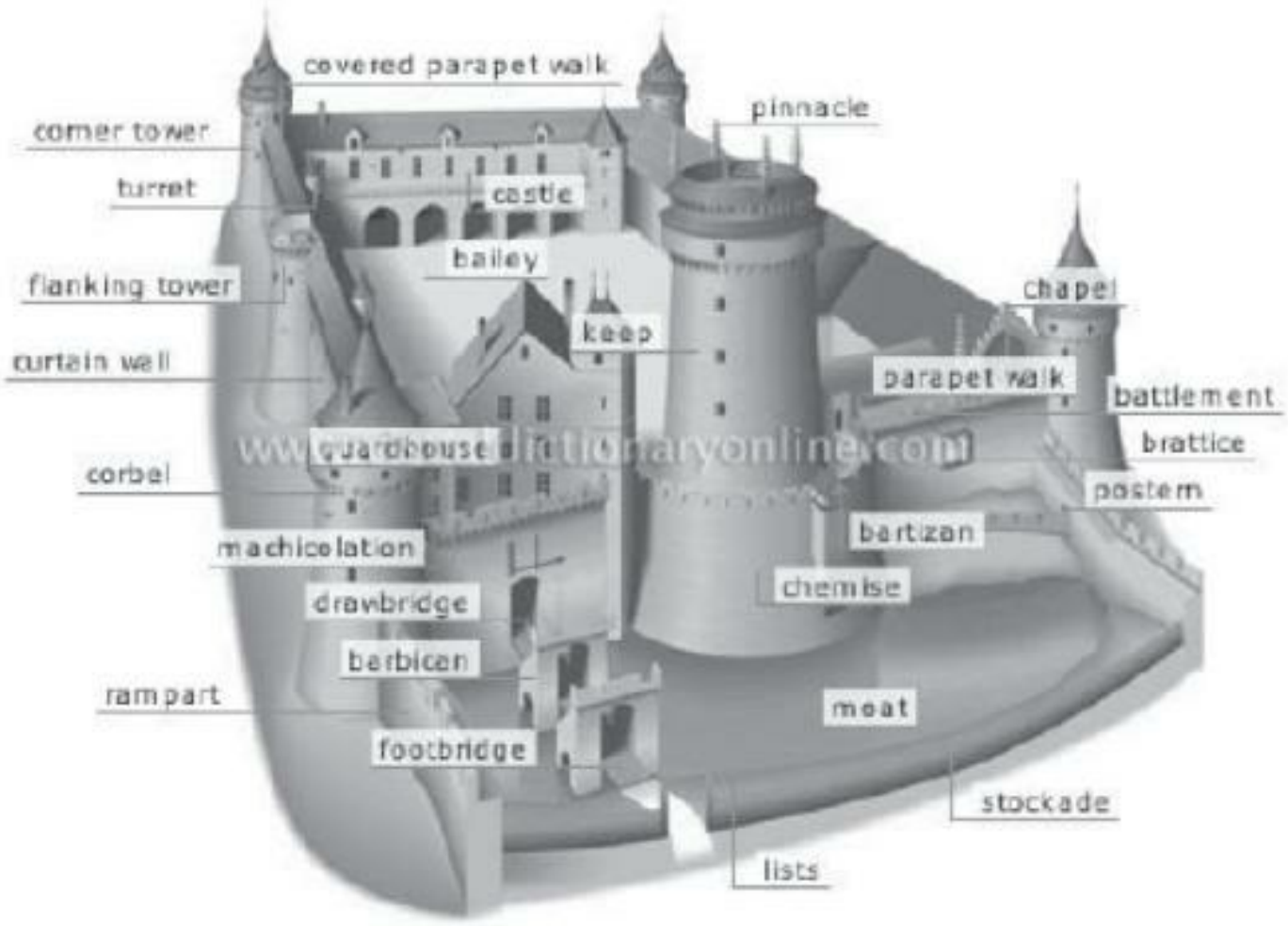
chisel with a 13th century iron mallet.

D. The progress of construction has to give way to tourists side for their visits. The visitors from 2010, however unsightly they may be, are vital to the project. The initial funding came not from pillaging the local peasantry but from regional councils, the European Union and large companies. For the last 10 years, Guédelon, 100 miles southeast of Paris, has funded itself from its entrance fees. Last year it had a record 300,000 visitors, who paid almost €2.5m, making it the second most-visited site in Burgundy. The most-visited site was the Hospice de Beaune, a beautiful 15th-century almshouse built 600 years before, or, if you prefer, 200 years "after", Guédelon.

E. limestone is found in the construction of various local buildings, from the great and prestigious edifice of Ratilly castle to the more modest poyaudines houses. This stone contains 30-40% iron oxide; this can make it extremely hard to extract and dress. Having studied the block in order to determine and anticipate the natural fault lines of the stone, the quarrymen first carve a series of rectilinear holes into the block. Iron wedges are then hammered into this line of holes. The shockwaves produced by the quarrymen's sledgehammers cause the stone to split along a straight line. The highest quality blocks are dressed to produce lintels, voussoirs, corbels, ashlars etc. The medium quality blocks are roughly shaped by the stonecutters and used on the uncoursed curtain walls, and as facing stones on the castle's inner walls. There are water-filled clay pits in the forest. Clay is taken from these pits, cleaned and pugged. It is then shaped in wooden moulds to form bricks. After the bricks have been left to air-dry, they are fired in a woodfired kiln for about 12 hours, at roughly 1000°c.

F. The mortar is the "glue" used to bind the castle's stones. It is made up of precise doses of lime, sand and water. The people working there wear the tunics, skirts and headgear that they might have worn then, but they wear these over jeans and shoes with reinforced toes. They mix their mortar primarily as they would have done then, using sand they dig themselves, but they are not allowed to use the extremely effective hot lime from medieval days, because of its toxicity, and so they add a modem chemical ingredient instead, to achieve the same effect. Workers in the Mid Age obviously were unaware of it and some died earlier by inhaling toxic gas. And so, we met many wonderful people who do not pretend to be anything but modem human beings practicing an old technique and finding out what it would have felt like, as much as possible, to do it with only the resources of an older time.

G. We also learned that even if there is a straight lintel across a doorway, you will usually find an arch of stones built into the wall differently. Because of the physics of an arch, which channels the weight above it down into whatever is supporting it at each side instead of pressing down in the middle, this helps to take a lot of the weight off of the lintel itself, whether it is free standing or buried in the wall against the impact of warfare. The arch is the strongest element for spanning space in stone architecture. This is why, in ancient ruins, you will often find the entire wall missing, and the arched windows and doorways still standing, in beautiful patterns against the sky.



Questions 1-4

Do the following statements agree with the information given in Reading Passage 1? In boxes 1-4 on your answer sheet, write

TRUE	*if the Statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

1 The French people would not abandon his idea in favor of realistic one.

2 One aim of the castle is to show the ancestral achievement to public.

3 Short lifespan of workers was due to overdue heating.

4 stones were laid not in a straight line arrangement to avoid damaging or collapsing.

Questions 5-10

Summary

Complete the following summary of the paragraphs of Reading Passage, using A-L from the following options for each answer. Write your answers in boxes 5-10 on your answer sheet.

Limestone Processing:

When____5____found suitable block, they began to cut lines of____6_____ into it. ____7_____were used and knocked into and generated shockwaves to make stone____8_____. Different qualities of blocks would be used in different place of castle. On the other hand, _____9_____were shaped from clay in a mould and went through a process of_____10_____ for about 12 hours.

A metal vedge

B hammer handle

C lift

D Masons

E patterns

F heating

G bricks

H wood

I experts

J split

K walls

L holes

Questions 11-13

Choose three correct letters, A-F.

Write your answers in boxes 11-13 on your answer sheet.

Why does the castle building project last 10 years for just half progress?

A. They lack of enough funds

B. Guedelon castle needs a time-consuming design

C. Workers obeyed modem working hours

D. Their progress were delayed by unpredictable weather

E. Guedelon castle need to receive valuable visitors

F. They used old techniques and skills

G. Stone processing need more labour and time

Section 2

Smell and Memory: SMELLS LIKE YESTERDAY

Why does the scent of a fragrance or the mustiness of an old trunk trigger such powerful memories of childhood? New research has the answer, writes Alexandra Witze.

A. You probably pay more attention to a newspaper with your eyes than with your nose. But lift the paper to your nostrils and inhale. The smell of newsprint might carry you back to your childhood, when your parents perused the paper on Sunday mornings. Or maybe some other smell takes you back- the scent of your mother's perfume, the pungency of a driftwood campfire. Specific odours can spark a flood of reminiscences. Psychologists call it the "Proustian phenomeno" after French novelist Marcel Proust. Near the beginning of the masterpiece *In Search of Lost Time*, Proust's narrator dunks a madeleine cookie into a cup of tea and the scent and taste unleash a torrent of childhood memories for 3000 pages.

B. Now, this phenomenon is getting the scientific treatment. Neuroscientists Rachel Herz, a cognitive neuroscientist at Brown University in Providence, Rhode Island, have discovered, for instance, how sensory memories are shared across the brain, with different brain regions remembering the sights, smells, tastes and sounds of a particular experience. Meanwhile, psychologists have demonstrated that memories triggered by smells can be more emotional, as well as more detailed, than memories not related to smells. When you inhale, odour molecules set brain cells dancing within a region known as the imygdala (E) , a part of the brain that helps control emotion. In contrast, the other senses, such as taste or touch, get routed through other parts of the brain before reaching the amygdala. The direct link between odours and the amygdala may help explain the emotional potency of smells. ''There is this unique connection between the sense of smell and the part of the brain that processes emotion," says Rachel Herz.

C. But the links don't stop there. Like an octopus reaching its tentacles outward, the memory of smells affects other brain regions as well. In recent experiments, neuroscientists at University College London (UCL) asked 15 volunteers to look at pictures while smelling unrelated odours. For instance, the subjects might see a photo of a duck paired with the scent of a rose, and then be asked to create a story linking the two. Brain scans taken at the time revealed that the volunteers'

brains were particularly active in a region known as the factory cortex, which is known to be involved in processing smells. Five minutes later, the volunteers were shown the duck photo again, but without the rose smell. And in their brains, the olfactory cortex lit up again, the scientists reported recently. The fact that the olfactory cortex became active in the absence of the odour suggests that people's sensory memory of events is spread across different brain regions. Imagine going on a seaside holiday, says UCL team leader, Jay Gottfried. The sight of the waves becomes stored in one area, whereas the crash of the surf goes elsewhere, and the smell of seaweed in yet another place. There could be advantages to having memories spread around the brain. "You can reawaken that memory from any one of the sensory triggers," says Gottfried. "Maybe the smell of the sun lotion, or a particular sound from that day, or the sight of a rock formation." Or - in the case of an early hunter and gatherer (out on a plain - the sight of a lion might be enough to trigger the urge to flee, rather than having to wait for the sound of its roar and the stench of its hide to kick in as well.

D. Remembered smells may also carry extra emotional baggage, says Herz. Her research suggests that memories triggered by odours are more emotional than memories triggered by other cues. In one recent study, Herz recruited five volunteers who had vivid memories associated with a particular perfume, such as opium for Women and Juniper Breeze from Bath and Body Works. She took images of the volunteers' brains as they sniffed that perfume and an unrelated perfume without knowing which was which. (They were also shown photos of each perfume bottle.) Smelling the specified perfume activated the volunteers brains the most, particularly in the amygdala, and in a region called the hippocampus which helps in memory formation. Herz published the work earlier this year in the journal *Neuropsychologia*.

E. But she couldn't be sure that the other senses wouldn't also elicit a strong response. So in another study Herz compared smells with sounds and pictures. She had 70 people describe an emotional memory involving three items - popcorn, fresh-cut grass and a campfire. Then they compared the items through sights, sounds and smells. For instance, the person might see a picture of a lawnmower, then sniff the scent of grass and finally listen to the lawnmower's sound. Memories triggered by smell were more evocative than memories triggered by either sights or sounds.

F. Odour-evoked memories may be not only more emotional, but more detailed as well. Working with colleague John Downes, psychologist Simon Chu of the University of Liverpool started researching odour and memory partly because of his grandmother's stories about Chinese culture. As generations gathered to share oral histories, they would pass a small pot of spice or incense around; later, when they wanted to remember the story in as much detail as possible, they would pass the same smell around again. "It's kind of fits with a lot of anecdotal evidence on how smells can be really good reminders of past experiences," Chu says. And scientific research seems to bear out the anecdotes. In one experiment, Chu and Downes asked 42 volunteers to tell a life story, then tested to see whether odours such as coffee and cinnamon could help them remember more detail in the story. They could.

G. Despite such studies, not everyone is convinced that Proust can be scientifically analysed. In the June issue of Chemical Senses, Chu and Downes exchanged critiques with renowned perfumer and

chemist J. Stephan Jellinek. Jellinek chided the Liverpool researchers for, among other things, presenting the smells and asking the volunteers to think of memories, rather than seeing what memories were spontaneously evoked by the odours. But there's only so much science can do to test a phenomenon that's inherently different for each person, Chu says. Meanwhile, Jellinek has also been collecting anecdotal accounts of Proustian experiences, hoping to find some common links between the experiences. "I think there is a case to be made that surprise may be a major aspect of the Proust phenomenon," he says. "That's why people are so struck by these memories." No one knows whether Proust ever experienced such a **transcendental** moment. But his notions of memory, written as fiction nearly a century ago, continue to inspire scientists of today.

Questions 14-18

Use the information in the passage to match the people (listed A-C) with opinions or deeds below. Write the appropriate letters A- c in boxes 14-18 on your answer sheet.

NB you may use any letter more than once

A Rachel Herz

B Simon Chu

C **Jay Gottfried**

.....

14 Found pattern of different sensory memories stored in various zones of a brain.

15 Smell brings detailed event under a smell of certain substance.

16 Connection of smell and certain zones of brain is different with that of other senses.

17 Diverse locations of stored information help **US** keep **away** the **hazard.**

18 There is no necessary correlation between smell and processing zone of brain.

Questions 19-22

*Choose the correct letter, A, **B,** c or **D.***

Write your answers in boxes 19-22 on your answer sheet.

19 In paragraph B, what do the experiments conducted by *Herz and other scientists* show?

A Women are more easily addicted to opium medicine

B Smell is superior to other senses in connection to the brain

C Smell is more important than other senses

D certain part of brain relates the emotion to the sense of smell

20 What does the *second experiment* conducted by *Herz* suggest?

A Result directly conflicts with the first one

B Result of her first experiment is correct

C Sights and sounds trigger memories at an equal level

D Lawnmower is a perfect example in the experiment

21 What is the outcome of experiment conducted by *Chu and Downes*?

A smell is the only functional under Chinese tradition

B half of volunteers told detailed stories

C smells of certain odours assist story tellers

D odours of cinnamon is stronger than that of coffee

22 What is the comment of **Jellinek** to *Chu and Downers* in the issue of *Chemical Senses'.*

A Jellinek accused their experiment of being unscientific

B Jellinek thought Liverpool is not a suitable place for experiment

C Jellinek suggested that there was no further clue of what specific memories aroused

D Jellinek stated that experiment could be remedied

Questions 23-26

Summary

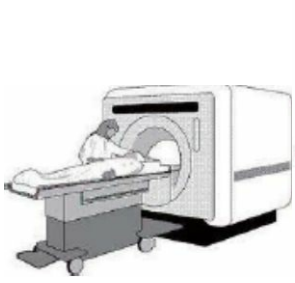
Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 23-26 on your answer sheet.

In the experiments conducted by UCL, participants were asked to look at a picture with a scent of a flower, then in the next stage, everyone would have to.....23.....for a connection. A method called.....24..... suggested that specific area of brain named.....25.....were quite active. Then in an another parallelled experiment about Chinese elders, storytellers could recall detailed anecdotes when smelling a bowl of.....26.....or incense around.

Section 3

Memory Decoding

Try this memory test: Study each face and compose a vivid image for the person's first and last name. Rose Leo, for example, could be a rosebud and a lion. Fill in the blanks on the next page. The Examinations School at Oxford University is an austere building of oak-paneled rooms, large Gothic windows, and looming portraits of eminent dukes and earls. It is where generations of Oxford students have tested their memory on final exams, and it is where, last August, 34 contestants gathered at the World Memory Championships to be examined in an entirely different manner.

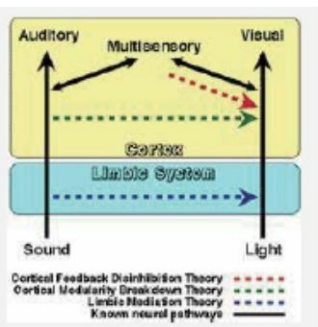


A. In timed trials, contestants were challenged to look at and then recite a two-page poem, memorize rows of 40-digit numbers, recall the names of 110 people after looking at their photographs, and perform seven other feats of extraordinary retention. Some tests took

just a few minutes; others lasted hours. In the 14 years since the World Memory Championships was founded, no one has memorized the order of a shuffled deck of playing cards in less than 30 seconds. That nice round number has become the four-minute mile of competitive memory, a benchmark that the world's best "mental athletes," as some of them like to be called, are closing in on. Most contestants claim to have just average memories, and scientific testing confirms that they're not just being modest. Their feats are based on tricks that capitalize on how the human brain encodes information. Anyone can learn them.

B. Psychologists Elizabeth Valentine and John Wilding, authors of the monograph Superior Memory, recently teamed up with Eleanor Maguire, a neuroscientist at University College London to study eight people, including Karsten, who had finished near the top of the World Memory Championships. They wondered if the contestants' brains were different in some way. The researchers put the competitors and a group of control subjects into an MRI machine and asked them to perform several different memory tests while their brains were being scanned When it came to memorizing sequences of three-digit numbers, the difference between the memory contestants and the control subjects was, as expected, immense. However, when they were shown photographs of magnified snowflakes, images that the competitors had never tried to memorize before, the champions did no better than the control group. When the researchers analyzed the brain scans, they found that the memory champs were activating some brain regions that were different from those the control subjects were using. These regions, which included the right posterior hippocampus, are known to be involved in visual memory and spatial navigation.

C. It might seem odd that the memory contestants would use visual imagery and spatial navigation to remember numbers, but the activity makes sense when their techniques are revealed Cooke, a 23-year-old cognitive-science graduate student with a shoulder-length mop of curly hair, is a grand master of brain storage. He can memorize the order of 10 decks of playing cards in less than an hour or one deck of cards in less than a minute. He is closing in on the 30-second deck. In the Lamb and Flag, Cooke pulled out a deck of cards and shuffled it. He held up three cards—the 7 of spades, the queen of clubs, and the 10 of spades. He pointed at a fireplace and said, "Destiny's Child is whacking Franz Schubert with handbags." The next three cards were the king of hearts, the king of spades, and the jack of clubs.



D. How did he do it? Cooke has already memorized a specific person, verb, and object that he associates with each card in the deck. For example, for the 7 of spades, the person (or,

in this case, persons) is always the singing group Destiny's Child, the action is surviving a storm, and the image is a dinghy. The queen of clubs is always his friend Henrietta, the action is thwacking with a handbag, and the image is of wardrobes filled with designer clothes. When Cooke commits a deck to memory, he does it three cards at a time. Every three-card group forms a single image of a person doing something to an object. The first card in the triplet becomes the person, the second the verb, the third the object. He then places those images along a specific familiar route, such as the one he took through the Lamb and Flag. In competitions, he uses an imaginary route that he has designed to be as smooth and downhill as possible. When it comes time to recall, Cooke takes a mental walk along his route and translates the images into cards. That's why the MRIs of the memory contestants showed activation in the brain areas associated with visual imagery and spatial navigation.

E. The more resonant the images are, the more difficult they are to forget. But even meaningful information is hard to remember when there's a lot of it. That's why competitive memorizers place their images along an imaginary route. That technique, known as the loci method, reportedly originated in 477 **B.C.** with the Greek poet Simonides of Ceos. Simonides was the sob survivor of a roof collapse that killed all the other guests at a royal banquet The bodies were mangled beyond recognition, but Simonides was able to reconstruct the guest list by closing his eyes and recalling each individual around the dinner table. What he had discovered was that our brains are exceptionally good at remembering images and spatial information. Evolutionary psychologists have offered an explanation: Presumably our ancestors found it important to recall where they found their last meal or the way back to the cave. After Simonides' discovery the loci method became popular across ancient Greece as a trick for memorizing speeches and texts. Aristotle wrote about it, and later a number of treatises on the art of memory were published in Rome. Before printed books, the art of memory was considered a staple of classical education, on a par with grammar, logic, and rhetoric.

F. The most famous of the naturals was the Russian journalist **S. V.** Shereshevski, who could recall tong lists of numbers memorized decades earlier, as well as poems, strings of nonsense syllables, and just about anything else he was asked to remember. "The capacity of his memory had no distinct limits," wrote Alexander Luria, the Russian psychologist who studied Shereshevski from the 1920s to the 1950s. Shereshevski also had synesthesia, a rare condition in which the senses become intertwined. For example, every number may be associated with a color or every word with a taste. Synesthetic reactions evoke a response in more areas of the brain, making memory easier.

G. K. Anders Ericsson, a Swedish-born psychologist at Florida State University, thinks anyone can acquire Shereshevski's skills. He cites an experiment with **s.** R, an undergraduate who was paid to take a standard test of memory called the digit span for one hour a day, two or three days a week. When he started, he could hold, like most people, only about seven digits in his head at any given time (conveniently, the length of a phone number). Over two years, **s.** F. completed 250 hours of testing. By then, he had stretched his digit span from 7 to more than 80. The study of **s.** F. led Ericsson to believe that innately superior memory doesn't exist at all When he reviewed original case studies of naturals, he found that exceptional memorizers were using techniques—sometimes without realizing it —and tots of practice. Often, exceptional memory was only for a single type of material, like digits. "If we took at some of these memory tasks, they're the kind of thing most people don't even waste one hour practicing, but if they wasted 50 hours, they'd be exceptional at it," Ericsson says. It would be remarkable, he adds, to find a "person who is exceptional across a number of tasks. I don't think that there's any compelling evidence that there are such people."

Questions 27-31

The reading Passage has seven paragraphs A-G.

Which paragraph contains the following information? Write the correct letter *A-Q* in boxes *27-31* on your answer sheet.

27 The reason why competence of super memory is significant in academic settings

28 Mention of a contest for extraordinary memory held in consecutive years

29 An demonstrative example of extraordinary person did an unusual recalling game Ị

30 A belief that extraordinary memory can be gained though enough practice

31 A depiction of rare ability which assist the extraordinary memory reactions

Questions 32-36

Complete the following summary of the paragraphs of Reading Passage, using ***no more than three*** *words from the Reading Passage for each answer. Write your answers in boxes 32-36 on your answer sheet.*

Using visual imagery and spatial navigation to remember numbers are investigated and explained. A man called Ed Cooke in a pub, spoke a string of odd words when he held 7 of the spades (the first one of the any cards group) was remembered as he encoded it to a.....32.....and the card deck to memory are set to be one time of a order of.....33.....; When it comes time to recall, Cooke took a.....34.....along his way and interpreted the imaginary scene into cards. This superior memory skill can be traced back to Ancient Greece, the strategy was called .....35..... which had been an major subject was in ancient.....36.....

Questions 37-38

Choose TWO correct letter, A-E

Write your answers in boxes ***37-38*** on your answer sheet.

'According to ***World Memory Championships,*** what activities need good memory?

A order for a large group of each digit

B recall people's face

C resemble a tong Greek poem

D match name with pictures and features

E recall what people ate and did yesterday

Questions 39-40

Choose TWO correct letter, A-E

Write your answers in boxes ***39-40*** on your answer sheet.

What is the result of Psychologists Elizabeth Valentine and John Wilding *s MRI Scan experiment find out?

A. the champions ' brains is different in some way from common people

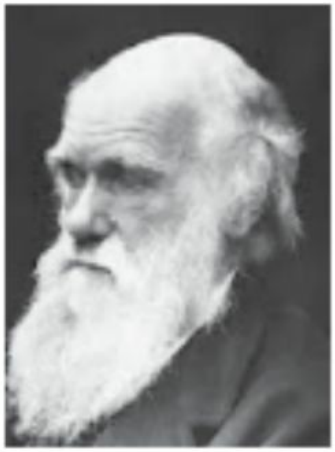
B difference in brain of champions' scan image to control subjects are shown when memorizing sequences of three-digit numbers

C champions did much worse when they are asked to remember photographs

D the memory-champs activated more brain regions than control subjects

E there is some part in the brain coping with visual and spatial memory

Reading Test 26



Section 1

Origin of Species & Continent Formation

A. THE FACT THAT there was once a Pangean supercontinent, a Panthalassa Ocean, and a Tethys Ocean, has profound implications for the evolution of multicellular life on Earth. These considerations were unknown to the scientsts of the 19th century — making their scientific deductions even more remarkable. Quite independently of each other, Charles Darwin and his young contemporary Alfred Russel Wallace reached the conclusion that life had evolved by natural selection. Wallace later wrote in *My Life* of his own inspiration:

B. Why do some species die and some live? The answer was clearly that on the whole the best fitted lived. From the effects of disease the most healthy escaped; from enemies the strongest, the swiftest

or the most cunning from famine the best hunters then it suddenly flashed on me that this self-acting process would improve the race, bacause in every generation the inferior would inevitably be killed off and the superior would remain, that is, the fittest would survive.

C. Both Darwin's and Wallace's ideas about natural selection had been influenced by the essays of Thomas Malthus in his *Principles of Population.* Their conclusions, however, had been the direct result of their personal observation of animals and plants in widely separated geographic locations: Darwin from his experiences during the voyage of the *Beagle*, and particularly during the ship's visit to the Galapagos Islands in the East Pacific in 1835; Wallace during his years of travel in the Amazon

Basin and in the Indonesia-Australian Archipelago in the 1850s.

Sir Charles Lyell.jpg

D. Darwin had been documenting his ideas on natural selection for many years when he received a paper on this selfsame subject from Wallace, who asked for Darwin's opinion and help in getting it published. In July 1858, Charles Lyell and J. D Hooker, close friends of Darwin, pressed Darwin to present his conclusions so that he would not lose priority to and unknown naturalist. Presiding over the hastily called but now historic meeting of the Linnean Society in London, Lyell and Hooker explained to the distinguished members how "these two gentlemen" (who were absent: Wallace was abroad and Darwin chose not to attend), had "independently and unknown to one another, conceived the same very ingenious theory"

E. Both Darwin and Wallace had realized that the anomalous distribution of species in particular regions had profound evolutionary significance. Subsequently, Darwin spent the rest of his days in almost total seclusion thinking and writing mainly about the origin of species. In constrast, Wallace applied himself to the science of biogeography, the study of the pattern and distribution of species, and its significance, resulting in the publication of a massive two-volume work the *Geographical Distribution of Animals* in 1876.

F. Wallace was a gentle and modest man, but also persistent and quietly courageous. He spent years working in the most arduous possible climates and terrains, particularly in the Malay archipelago, he made patient and detailed zoological observations and collected huge number of speciments for museums and collectors-which is how he made a living. One result of his work was the conclusion that there is a distinct faunal boundary, called "Wallace's line, " between an Asian realm of animals in Java, Borneo and the Philipiones and an Australian realm in New Guinea and Australia. In essence this boundary posed a difficult question: How on Earth did plants and animals with a clear affinity to the Northern Hemisphere meet with their Southern Hemispheric counterparts along such a distinct Malaysian demarcation zone? Wallace was uncertain about demarcation on one particular island-Celebes, a curiously shaped place that is midway between the two groups. Initially he assigned its flora-fauna to the Australian side of the line, but later he transferred it to the Asian side. Today we know the reason for his dilemma. 200MYA East and West Celebes were islands with their own natural history lying on opposite sides of the Tethys Ocean. They did not collide until about 15 MYA. The answer to the main question is that Wallace's Line categorizes Laurasia-derived flora-fauna (the Asian) and Gondwana-derived flora-fauna (the Australian), fauna that had evolved on opposing shares of the Tethys. The closure of the Tethys Ocean today is manifested by the ongoing collision of Australia/New Guinea with Indochina/Indonesia and the continuing closure of the Mediterranean Sea —a remnant of the Western Tethys Ocean.

G. IN HIS ORIGIN OF CONTINENTS AND OCEANS, Wegener quoted at length from Wallace's Geographical Distribution of Animals. According to Wegener's reading, Wallace had identified three clear divisions of Australian animals, which supported his own theory of continental displacement. Wallace had shown that animals long established in southwestern Australia had an affinity with animals in South Africa, Madagascar, India, and Ceylon, but did not have an affinity with those in

Asia. Wallace also showed that Australian marsupials and monotremes are clearly related to those in South America, the Moluccas, and various Pacific islands, and that none are found in neighboring Indonesia. From this and related data, Wegener concluded that the then broadly accepted "landbridge" theory could not account for this distribution of animals and that only his theory of continental drift could explain it.

H. The theory that Wegener dismissed in preference to his own proposed that plants and animals had once migrated across now-submerged intercontinental landbridges. In 1885, one of Europe[9] s leading geologists, Eduard Suess, theorized that as the rigid Earth cools, its upper crust shrinks and wrinkles like the withering skin of an aging apple. He suggested that the planet' s seas and oceans now fill the wrinkles between once-contiguous plateaus.

I. Today, we know that we live on a dynamic Earth with shifting, colliding and separating tectonic plates, not a "withering skin", and the main debate in the field of biogeography has shifted. The discussion now concerns "dispersalism" versus "vicarianism" runrestricted radiation of species on the one hand and the development of barriers to migration on the other. Dispersion is a short-term phenomenon—the daily or seasonal migration of species and their radiation to the limits of their natural environment on an extensive and continuous landmass. Vicarian evolution, however, depends upon the separation and isolation of a variety of species within the confines of natural barriers in the form of islands, lakes, or shallow seas—topographical features that take a long time to develop.

Questions 1-5

Use the information in the passage to match the people (listed A-E) with opinions or deeds below. Write the appropriate letters A-E in boxes 1-5 on your answer sheet.

A Suess

B Wallace

C Darwin and Wallace

D Wegener

E Lyell and Hooker

.....

1 urged Darwin to publish his scientific findings

2 Depicted physical feature of earth's crust.

3 believed in continental drift theory while rejecting another one

4 Published works about wildlife distribution in different region.

5 Evolution of species is based on selection by nature.

Questions 6-8

The reading Passage has nine paragraphs Á -I.

Which paragraph contains the following information?

Write the correct letter A-I in boxes 6-8 on your answer sheet.

6 Best adaptable animal survived on the planet.

7 Boundary called Wallace's line found between Asia and Australia.

8 Animal relevance exists between Australia and Africa.

Questions 9-13

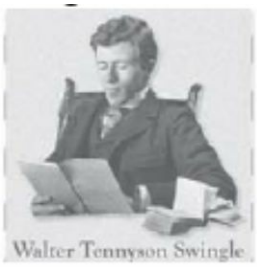
Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 9-13 on your answer sheet.

Wegener found that continental drift instead of "land bridge" theory could explain strange species' distribution phenomenon. In his theory, vegetation and wildlife____9____ intercontinentally. However, Eduard Suess compared the wrinkle of crust to____10_____of an old apple. Now it is well known that we are living on the planet where there are _____11_____in constant mobile states instead of what Suess described Hot spot in biogeography are switched to concerns between two terms:"_____12____" and "____13_____".

Section 2

Chinese Yellow Citrus Ant for BIOLOGICAL CONTROL



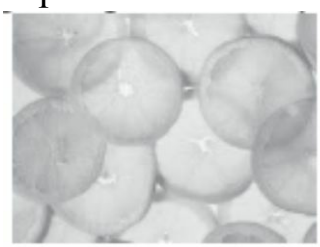
A. In 1476, the farmers of Berne in Switzerland decided, according to this story, there was only one way to rid their fields of the cutworms attacking their crops. They took the pests to court. The worms were tried, found guilty and excommunicated by the archbishop. In China, farmers had a more practical approach to pest control. Rather than rely on divine intervention, they put their faith in frogs, ducks and ants. Frogs and ducks were encouraged to map up the pests in the paddies and the occasional plague of locusts. But the notion of biological control began with an ant. More specifically, the story says, it started with the predatory yellow citrus ant is a type of weaver ant, which has been polishing off pests in the orange groves of southern China for at least 1700 years. The yellow citrus ant $0 is a type of weaver ant, which binds leaves and twigs with silk to form a neat, tent-like nest. In the beginning, farmers made do with the odd ants' nest here and there. But it wasn't long before growing demand led to the development of a thriving trade in nests and a new type of agriculture—ant farming.

B. For an insect that bites, the yellow citrus ant is remarkably popular. Even by ant standards, Oecophylla smaragdina is a fearsome predator. It's big, runs fast and has a powerful nip - painful to humans but lethal to many of the insects that plague the orange groves of Guangdong and Guangxi in southern China. And for at least 17 centuries. Chinese orange growers have harnessed these sixlegged killing machines to keep their fruit groves healthy and productive. The story explains that citrus - a fruits evolved in the Far East and the Chinese discovered the delights of their flesh early on. As the ancestral home of oranges, lemons and pomelos, China also has the greatest diversity of citrus pests. And the trees that produce the sweetest fruits, the mandarins—or kan-attract a host of planteating insects, from black ants and sap-sucking mealy bugs to leaf-devouring caterpillars. With so many enemies, fruit growers clearly had to have some way of protecting their orchards.

C. The West did not discover the Chinese orange growers' secret weapon until the early 20th century. At the time, Florida was suffering an epidemic of: itrus canker and in 1915 Walter Swingle, a plant physiologist working for the US Department of Agriculture, was, the story says, sent to China in search of varieties of orange that were resistant to the disease. Swingle spent some time studying the citrus orchards around Guangzhou, and there he came across the story of the cultivated ant. These ants, he was told, were "grown" by the people of a small village nearby who sold them to the orange growers by the nestful.

D. The earliest report of citrus ants at work among the orange trees appears in a book on tropical and subtropical botany written by His Han in AD 304. "The people of Chiao-Chih sell in their markets ants in bags of rush matting. The nests are like silk. The bags are all attached to twigs and leaves which, with the ants inside the nests, are for sale. The ants are reddish-yellow in colour, bigger than ordinary ants. In the south if the kan trees do not have this kind of ant, the fruits will all be damaged by many harmful insects, and not a single fruit will be perfect."

E. Initially, farmers relied on nests which they collected from the wild or bought in the market — where trade in nests was brisk. 'It is said that in the south orange trees which are free of ants will have wormy fruits. Therefore the people race to buy nests for their orange trees,' wrote Liu Hsun in Strange Things Noted in the South, written about AD 890. The business quickly became more sophisticate. From the 10th century, country people began to trap ants in artificial



nests baited with fat. "Fruit growing families buy these ants from vendors who make a business of collecting and selling such creatures," wrote Chuang Chi-Yu in 1130. "They trap them by filling hogs' or sheep's bladders with fat and placing them with the cavities open next to the ants' nests. They wait until the ants have migrated into the bladders and take them away. This is known as 'rearing orange ants'." Farmers attached the bladders to their trees, and in time the ants spread to other trees and built new nests. By the 17th century, growers were building bamboo walkways between their trees to speed the colonization of their orchards. The ants ran along these narrow bridges from one tree to another and established nests "by the hundreds of thousands".

F. Did it work? The orange growers clearly thought so. One authority, Chi Ta—Chun, writing in 1700, stressed how important it was to keep the fruit trees free of insect pests, especially caterpillars. "It is

essential to eliminate them so that the trees are not injured. But hand labour is not nearly as efficient as ant power..." Swingle was just as impressed. Yet despite this reports, many Western biologists were skeptical. In the West, the idea of using one insect to destroy another was new and highly controversial. The first breakthrough had come in 1888, when the infant $_a$ orange industry in California had been saved from extinction by the Australian vedalia beetle. This beetle was the only thing that had made any inroad into the explosion of cottony cushion scale that was threatening to destroy the state's citrus crops. But, as Swingle now knew, California's "first" was nothing of the sort. The Chinese had been expert in biocontrol for many centuries.

G. The story goes on to say that the long tradition of ants in the Chinese orchards only began to waver in the 1950s and 1960s with the introduction of powerful organic (I guess the author means chemical insecticides. Although most fruit growers switched to chemicals, a few hung onto their ants. Those who abandoned ants in favour of chemicals quickly became disillusioned. As costs soared and pests began to develop resistance to the chemicals, growers began to revive the old ant patrols. They had good reason to have faith in their insect workforce. Research in the early 1960s showed that as long as there were enough ants in the trees, they did an excellent job of dispatching some pests—mainly the larger insects—and had modest success against others. Trees with yellow ants produced almost 20 per cent more healthy leaves than those without. More recent trials have shown that these trees yield just as big a crop as those protected by expensive chemical sprays.

H. One apparent drawback of using ants—and one of the main reasons for the early skepticism by Western scientists—was that citrus ants do nothing to control mealy bugs, waxy-coated scale insects which can do considerable damage to fruit frees. In fact, the ants protect mealy bugs in exchange for the sweet honeydew they secrete. The orange growers always denied this was a problem but Western scientists thought they knew better. Research in the 1980s suggests that the growers were right all along. Where mealy bugs proliferate under the ants' protection they are usually heavily parasitized and this limits the harm they can do. Orange growers who rely on carnivorous ants rather than poisonous chemicals maintain a better balance of species in their orchards. While the ants deal with the bigger insect pests, other predatory species keep down the numbers of smaller pests such as scale insects and aphids. In the long run, ants do a lot less damage than chemicals-and they're certainly more effective than excommunication.

Questions 14-18

Use the information in the passage to match the year (listed A-G) with correct description below. Write the appropriate letters A-G in boxes 14-18 on your answer sheet.

NB you may use any letter more than once

A	**1888**
B	**1476**
C	**1915**
D	**1700**
E	**1130**
F	**AD**
G	**1950**

---

14 First record of ant against pests written.

15 **WS** studied ant intervention method in China.

16 First case of orange crops rescued by insect in western world.

17 Chinese farmers start to choose chemical method.

18 A book wrote mentioned ways to trap ants.

Questions 19-26

Do the following statements agree with the information given in Reading Passage 2?

In boxes 19-26 on your answer sheet, write

TRUE *if the statement is true*

FALSE *if the statement is false*

NOT GIVEN *if the information is not given in the passage*

19 China has the most citrus pests counted in types in the world.

20 Swingle came to China in order to search an insect for the US government.

21 Western people were impressed by Swingle's theory of pest prevention.

22 Chinese farmers realised that price of pesticides became expensive.

23 Some Chinese farmers start to abandon the use of pesticide.

24 Trees without ants had grown more unhealthy leaves than those with.

25 Yield of fields using ants is larger a crop than that using chemical pesticides.

26 Chinese orange farmers proposed that ant protection doesn't work out of China.

Section 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 on the following pages.

Mechanisms of Linguistic Change

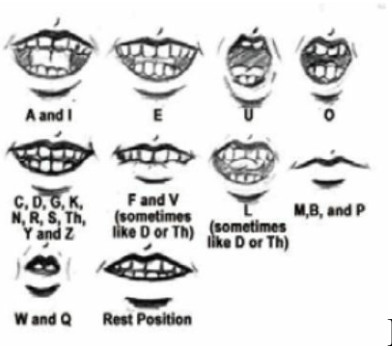
A. The changes that have caused the most disagreement are those in pronunciation. We have various sources of evidence for the pronunciations of earlier times, such as the spellings, the treatment of words borrowed from other languages or borrowed by them, the descriptions of contemporary grammarians and spelling-reformers, and the modern pronunciations in all the languages and dialects concerned From the middle of the sixteenth century, there are in England

writers who attempt to describe the position of the speech-organs for the production of English phonemes, and who invent what are in effect systems of phonetic symbols. These various kinds of evidence, combined with a knowledge of the mechanisms of speech-production, can often give **US** a very good idea of the pronunciation of an earlier age, though absolute certainty is never possible.

B. When we study the pronunciation of a language over any period of a few generations or more, we find there are always large-scale regularities in the changes: for example, over a certain period of time, just about all the long [a:] vowels in a language may change into long [e:] vowels, or all the [b] consonants in a certain position (for example at the end of a word) may change into [p] consonants. Such regular changes are often called **sound laws.** There are no universal sound laws (even though sound laws often reflect universal tendencies), but simply particular sound laws for one given language (or dialect) at one given period.

C. It is also possible that **fashion** plays a part in the process of change. It certainly plays a part in the spread of change: one person imitates another, and people with the most prestige are most likely to be imitated, so that a change that takes place in one social group may be imitated (more or less accurately) by speakers in another group. When a social group goes up or down in the world, its pronunciation may gain or lose prestige. It is said that, after the Russian Revolution of 1917, the upper-class pronunciation of Russian, which had formerly been considered desirable, became on the contrary an undesirable kind of accent to have, so that people tried to disguise it. Some of the changes in accepted English pronunciation in the seventeenth and eighteenth centuries have been shown to consist in the replacement of one style of pronunciation by another style already existing, and it is likely that such substitutions were a result of the great social changes of the period: the increased power and wealth of the middle classes, and their steady infiltration upwards into the ranks of the landed gentry, probably carried elements of middle-class pronunciation into upper-class speech.

D. A less specific variant of the argument is that the **imitation of children is imperfect:** they copy their parents' speech, but never reproduce it exactly. This is true, but it is also true that such deviations from adult speech are usually corrected in later childhood. Perhaps it is more significant that even adults show a certain amount of random variation in their pronunciation of a given phoneme, even if the phonetic context is kept unchanged. This, however, cannot explain changes in pronunciation unless it can be shown that there is some systematic trend in the failures of imitation: if they are merely random deviations they will cancel one another out and there will be no net change in the language.



E. One such force which is often invoked is the **principle of ease,** or minimization of effort. The change from fussy to fuzzy would be an example of assimilation, which is a very common kind of change. Assimilation is the changing of a sound under the influence of a neighbouring one. For example, the word scant was once skamt, but the /m/ has been changed to /n/ under the influence of the following /t/. Greater efficiency has hereby been achieved, because /n/ and / U̓ are articulated in the same place (with the tip of the tongue against the teeth-ridge), whereas /m/ is articulated elsewhere (with the two lips). So the place of articulation of the nasal consonant has been changed to conform with that of the following plosive. A more recent example of the same kind of thing is the common pronunciation of football as foopball.

F. Assimilation is not the only way in which we change our pronunciation in order to increase efficiency. It is very common for consonants to be lost at the end of a word: in Middle English, word-final [-n] was often lost in unstressed syllables, so that baken 'to bake' changed from [ba:kon] to ['ba:ko],and later to [ba:k]. Consonant-clusters are often simplified. At one time there was a [t] in words like castle and Christmas, and an initial [k] in words like knight and know. Sometimes a whole syllable is dropped out when two successive syllables begin with the same consonant (haplology): a recent example is temporary, which in Britain is often pronounced as if it were tempory.

Questions 27-30

Complete the summary below.

Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer. Write your answers in boxes 27-30 on your answer sheet.*

The pronunciation of living language undergo changes throughout thousands of years. Large scale regular Changes are usually called 27_____. There are three reasons for these changes. Firstly, the influence of one language on another; when one person imitates another pronunciation (the most prestige's], the imitation always partly involving factor of 28_____. Secondly, the imitations of children from adults' language sometimes are 29_____, and may also contribute to this change if there are insignificant deviations tough later they may be corrected Finally, for those random variations in pronunciation, the deeper evidence lies in the 30_____or minimization of effort.

Questions 31-37

Do the following statements agree with the information given in Reading Passage 3? In boxes 31-37 on your answer sheet, write

TRUE	*if the statement agrees with the information*

FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

31 it is impossible for modern people to find pronunciation of words in an earlier age

32 The great change of language in Russian history is related to the rising status and fortune of middle classes.

33 All the children learn speeches from adults while they assume that certain language is difficult to imitate exactly.

34 Pronunciation with causal inaccuracy will not exert big influence on language changes.

35 The link of ‘mt’ can be influenced being pronounced as 'nt’

36 The [g] in gnat not being pronounced will not be spelt out in the future.

37 The sound of 'temporary' cannot wholly present its spelling.

Questions 38-40

Look at the following sentences and the list of statements below. Match each statement with the correct sentence, A-D.

Write the correct letter, A-D, in boxes 38-40 on your answer sheet

A Since the speakers can pronounce it with less effort

B Assimilation of a sound under the influence of a neighbouring one

C It is a trend for changes in pronunciation in a large scale in a given period

D Because the speaker can pronounce [n] and [t] both in the same time

---

38 As a consequence, ‘b’ will be pronounced as ‘p’

39 The pronunciation of [mt] changed to [nt]

40 The omit of 't' in the sound of Christmas

Reading Test 27

Section 1

Museum Blockbuster

A. Since the 1980s, the term "blockbuster" has become the fashionable word for special spectacular museum, art gallery or science centre exhibitions. These exhibitions have the ability to attract large crowds and often large corporate sponsors. Here is one of some existing definitions of blockbuster: Put by Elsen (1984), a blockbuster is a "... large scale loan exhibition that people who normally don't go to museums will stand in line for hours to see ..."James Rosenfield, writing in Direct Marketing in 1993, has described a successful blockbuster exhibition as a "... triumph of both curatorial and marketing skills ..." My own definition for blockbuster is "a popular, high profile exhibition on display for a limited period, that attracts the general public, who are prepared to both stand in line and pay a fee in order to partake in the exhibition." What both Elsen and Rosenfield omit in the ũ descriptions of blockbusters, is that people are prepared to pay a fee to see a blockbuster, and that the term blockbuster can just as easily apply to a movie or a museum exhibition.

B. Merely naming an exhibition or movie a blockbuster however, does not make it a blockbuster. The term can only apply when the item in question has had an overwhelmingly successful response from the public. However, in literature from both the UK and USA the other words that also start to appear in descriptions of blockbusters are "less scholarly", "non-elitist" and "popularist". Detractors argue that blockbusters are designed to appeal to the lowest common denominator, while others extol the virtues of encouraging scholars to cooperate on projects, and to provide exhibitions that cater for a broad selection of the community rather than an elite sector.

C. Maintaining and increasing visitor levels is paramount in the new museology. This requires continued product development. Not only the creation or hiring of blockbuster exhibitions, but regular exhibition changes and innovations. In addition, the visiting publics have become customers rather than visitors, and the skills that are valued in museums, science centres and galleries to keep the new customers coming through the door have changed. High on the list of requirements are commercial, business, marketing and entrepreneurial skills. Curators are now administrators. Being a director of an art gallery no longer requires an Art Degree. As succinctly summarised in the Economist in 1994 "business nous and public relation skills" were essential requirements for a director, and the ability to compete with other museums to stage travelling exhibitions which draw huge crowds.

D. The new museology has resulted in the convergence of museums, the heritage industry, and tourism, profit-making and pleasure-giving. This has given rise to much debate about the appropriateness of adapting the activities of institutions so that they more closely reflect the priorities of the market place and whether it is appropriate to see museums primarily as tourist attractions. At many institutions you can now hold office functions in the display areas, or have dinner with the dinosaurs. Whatever commentators may think, managers of museums, art galleries and science centres worldwide are looking for artful ways to blend culture and commerce, and blockbuster exhibitions are at the top of the list. But while blockbusters are all part of the new museology, there is proof that you don't need a museum, science centre or art gallery to benefit from the drawing power of a blockbuster or to stage a blockbuster.

E. But do blockbusters held in public institutions really create a surplus to fund other activities? If the bottom line is profit, then according to the accounting records of many major museums and galleries, blockbusters do make money. For some museums overseas, it may be the money that they need to update parts of their collections or to repair buildings that are in need of attention. For others in Australia, it may be the opportunity to illustrate that they are attempting to pay their way, by recovering part of their operating costs, or funding other operating activities with off-budget revenue. This makes the economic rationalists cheerful. However, not all exhibitions that are hailed to be blockbusters will be blockbusters, and some will not make money. It is also unlikely that the accounting systems of most institutions will recognise the real cost of either creating or hiring a blockbuster.

F. Blockbusters requ ŭ r e large capital expenditure, and draw on resources across all branches of an organisation; however, the costs don't end there. There is a Human Resource Management cost in addition to a measurable 'real' dollar cost. Receiving a touring exhibition involves large expenditure as well, and draws resources from across functional management structures in project management style. Everyone from a general labourer to a building servicing unit, the front of house, technical, promotion, education and administration staff, are required to perform additional tasks. Furthermore, as an increasing number of institutions in Australia fry their hand at increasing visitor numbers, memberships (and therefore revenue), by staging blockbuster exhibitions, it may be less likely that blockbusters will continue to provide a surplus to subsidise other activities due to the competitive nature of the market. There are only so many consumer dollars to go around, and visitors will need to choose between blockbuster products.

G. Unfortunately, when the bottom-line is the most important objective to the mounting of blockbuster exhibitions, this same objective can be hard to maintain. Creating, mounting or hiring blockbusters is exhausting for staff, with the real costs throughout an institution difficult to calculate. Although the direct aims may be financial, creating or hiring a blockbuster has many positive spin-offs; by raising their profile through a popular blockbuster exhibition, a museum will be seen in a more favorable light at budget time. Blockbusters mean crowds, and crowds are good for the local economy, providing increased employment for shops, hotels, restaurants, the transport industry and retailers. Blockbusters expose staff to the vagaries and pressures of the market place, and may lead to creative excellence. Either the success or failure of a blockbuster may highlight the need for managers and policy makers to rethink their strategies. However, the new museology and the apparent trend towards blockbusters make it likely that museums, art galleries and particularly science centres will be seen as part of the entertainment and tourism industry, rather than as cultural icons deserving of government and philanthropic support.

H. Perhaps the best pathway to take is one that balances both blockbusters and regular exhibitions. However, this easy middle ground may only work if you have enough space, and have alternate sources of funding to continue to support the regular less exciting fare. Perhaps the advice should be to make sure that your regular activities and exhibitions are more enticing, and find out what your local community wants from you. The question (trend) now at most museums and science centres, is "What blockbusters can we tour to overseas venues and will it be cost effective?"

Questions 1-4

The reading Passage has seven paragraphsA-IT.

Which paragraphs contains the following information?

*Write the correct letter **A-H,** in boxesl-4 on your answer sheet.*

NB You ma use an letter more than once.

1 A reason for changing the exhibition programs.

2 The time people have to wait in a queue in order to enjoy exhibitions.

3 Terms people used when referring to blockbuster

4 There was some controversy over confining target groups of blockbuster.

Questions 5-8

Summary

*Complete the following summary of the paragraphs of Reading Passage, using **no more than three words** from the Reading Passage for each answer. Write your answers in boxes 5-8 on your answer sheet.*

Instead of being visitors, people turned out to be____5_____, who require the creation or hiring of blockbuster exhibitions as well as regular exhibition changes and innovations. Business nous and ____6_____simply summarized in a magazine are not only important factors for directors, but also an ability to attract a crowd of audiences. _____7_____ has contributed to the linking of museums, the heritage industry, tourism, profit-making and pleasure-giving. There occurs some controversy over whether it is proper to consider museums mainly as_____8_____.

Questions 9-10

*Choose **TWO** letters **A-E.***

Write your answer in boxes 9-10 on your answer sheet.

The list below gives some advantages of blockbuster.

Which TWO advantages are mentioned by the writer of the text?

A To offer sufficient money to repair architectures.

B To maintain and increase visitor levels.

C Presenting the mixture in the culture and commerce of art galleries and science centres worldwide.

D Being beneficial for the development of local business.

E Being beneficial for the directors.

Questions 11 - 13

*Choose **THREE** letters **A-F.***

Write your answer in boxes 11-13on your answer sheet.

The list below gives some disadvantages of blockbuster.

Which THREE disadvantages are mentioned by the writer of the text?

A People felt hesitated to choose exhibitions.

B Workers has become tired of workloads.

C The content has become more entertaining rather than cultural.

D General labourers are required to perform additional tasks

E Huge amounts of capital invested in specialists.

F Exposing staff to the fantasies and pressures of the market place.

Section 2

Stress of Workplace

A. How busy is too busy? For some it means having to miss the occasional long lunch; for others it means missing lunch altogether. For a few, it is not being able to take a "sickie" once a month. Then there is a group of people for whom working every evening and weekend is normal, and frantic is the tempo of their lives. For most senior executives, workloads swing between extremely busy and frenzied. The vice-president of the management consultancy AT Kearney and its head of telecommunications for the Asia-Pacific region, Neil Plumridge, says his work weeks vary from a "manageable" 45 horns to 80 hours, but average 60 hours.

B. Three warning signs alert Plumridge about his workload: sleep, scheduling and family. He knows he has too much on when he gets less than six hours of sleep for three consecutive nights; when he is constantly having to reschedule appointments; "and the third one is on the family side", says Plumridge, the father of a three-year-old daughter, and expecting a second child in October. "If I happen to miss a birthday or anniversary, I know things are out of control." Being "too busy" is highly subjective. But for any individual, the perception of being too busy over a

prolonged period can start showing up as stress: disturbed sleep, and declining mental and physical health. National workers' compensation figures show stress causes the most lost time of any workplace injury. Employees suffering stress are off work an average of 16.6 weeks. The effects of stress are also expensive. Comcare, the Federal Government insurer, reports that in 2003-04, claims for psychological injury accounted for 7% of claims but almost 27% of claim costs. Experts say the key to dealing with stress is not to focus on relief - a game of golf or a massage - but to reassess workloads. Neil Plumridge says he makes it a priority to work out what has to change; that might mean allocating extra resources to a job, allowing more time or changing expectations. The decision may take several days. He also relies on the advice of colleagues, saying his peers coach each other with business problems. "Just a fresh pair of eyes over an issue can help," he says.

C. Executive stress is not confined to big organisations. Vanessa Stoykov has been running her own advertising and public relations business for seven years, specialising in work for financial and professional services firms. Evolution Media has grown so fast that it debuted on the BRW Fast 100 list of fastest-growing small enterprises last year - just after Stoykov had her first child. Stoykov thrives on the mental stimulation of running her own business. "Like everyone, I have the occasional day when I think my head's going to blow off," she says. Because of the growth phase the business is in, Stoykov has to concentrate on short-term stress relief - weekends in the mountains, the occasional "mental health" day - rather than delegating more work. She says: "We're hiring more people, but you need to train them, teach them about the culture and the clients, so it's actually more work rather than less."

D. Identify the causes: Jan Elsnera, Melbourne psychologist who specialises in executive coaching, says thriving on a demanding workload is typical of senior executives and other high-potential business people. She says there is no one-size-fits-all approach to stress: some people work best with high-adrenalin periods followed by quieter patches, while others thrive under sustained pressure. "We could take urine and blood hormonal measures and pass a judgement of whether someone's physiologically stressed or not," she says. "But that's not going to give **US** an indicator of what their experience of stress is, and what the emotional and cognitive impacts of stress are going to be."

E. Eisner's practice is informed by a movement known as positive psychology, a school of thought that argues "positive" experiences - feeling engaged, challenged, and that one is making a contribution to something meaningful - do not balance out negative ones such as stress; instead, they help people increase their resilience over time. Good stress, or positive experiences of being challenged and rewarded, is thus cumulative in the same way as bad stress. Eisner says many of the senior business people she coaches are relying more on regulating bad stress through methods such as meditation and yoga. She points to research showing that meditation can alter the biochemistry of the brain and actually help people "retrain" the way their brains and bodies react to stress. "Meditation and yoga enable you to shift the way that your brain reacts, so if you get proficient at it you're in control.

F. The Australian vice-president of AT Kearney, Neil Plumridge, says: "Often stress is caused by our

setting unrealistic expectations of ourselves. I'll promise a client I'll do something tomorrow, and then [promise] another client the same thing, when I really know it's not going to happen. I've put stress on myself when I could have said to the clients: 'Why don't I give that to you in 48 hours?' The client doesn't care." Overcommitting is something people experience as an individual problem. We explain it as the result of procrastination or Parkinson's law: that work expands to fill the time available. New research indicates that people may be hard-wired to do it.

G. A study in the February issue of the Journal of Experimental Psychology shows that people always believe they will be less busy in the future than now. This is a misapprehension, according to the authors of the report, Professor Gal Zauberman, of the University of North Carolina, and Professor John Lynch, of Duke University. "On average, an individual will be just as busy two weeks or a month from now as he or she is today. But that is not how it appears to be in everyday life," they wrote. "People often make commitments long in advance that they would never make if the same commitments required immediate action. That is, they discount future time investments relatively steeply." Why do we perceive a greater "surplus" of time in the future than in the present? The researchers suggest that people underestimate completion times for tasks stretching into the future, and that they are bad at imagining future competition for their time.

Questions 14-18

Use the information in the passage to match the people (listed A-D) with opinions or deeds below. Write the appropriate letters A-D in boxes 14-18 on your answer sheet.

NB you may use any letter more than once

A. Jan Elsnera **B. Vanessa Stoykov** C. **Gal Zauberman** **D. Neil Plumridge**

14 Work stress usually happens in the high level of a business.

15 More people's ideas involved would be beneficial for stress relief

16 Temporary holiday sometimes doesn't mean less work.

17 Stress leads to a wrong direction when trying to satisfy customers.

18 It is not correct that stress in the future will be eased more than now

Questions 19-21

Choose the correct letter, A, B, c or D.

Write your answers in boxes 19-21 on your answer sheet.

19 Which of the following workplace stress is NOT mentioned according to ***Plumridge*** in the following options?

A Not enough time spend on family

B Unable to concentrate on work

C Inadequate time of sleep

D Alteration of appointment

20 Which of the following solution is NOT mentioned in helping reduce the work pressure according to ***Plumridgel***

A. Allocate more personnel

B. Increase more time

C. Lower expectation

D. Do sports and massage

21 What is point of view of ***Jan Elsnera*** towards work stress?

A Medical test can only reveal part of the data needed to cope with stress

B Index some body samples will be abnormal in a stressful experience

C Emotional and cognitive affection is superior to physical one

D One well designed solution can release all stress

Questions 22-27

Summary

Complete the following summary of the paragraphs of Reading Passage, using ***no more than two*** *words from the Reading Passage for each answer. Write your answers in boxes 22-27 on your answer sheet.*

Statistics from National worker's compensation indicate stress plays the most important role in____22_____ which cause the time losses. Staffs take about ____23_____ for absence from work caused by stress. Not just time is our main concern but great expenses generated consequently. An official insurer wrote sometime that about ____24_____ of all claims were mental issues whereas nearly 27% costs in all claims. Sports such as _____25_____, as well as 26 could be a treatment to release stress; However, specialists recommended another practical way out, analyse _____27____once again.

Section 3

Company Innovation

A. IN A scruffy office in midtown Manhattan, a team of 30 artificial-intelligence programmers is trying to simulate the brains of an eminent sexologist, a well-known dietician, a celebrity fitness trainer and several other experts. Umagic Systems is a young firm, setting up websites

that will allow clients to consult the virtual versions of these personalities. Subscribers will feed in details about themselves and their goals; Umagic's software will come up with the advice that the star expert would give. Although few people have lost money betting on the neuroses of the American consumer, Umagic's prospects are hard to gauge (in ten years' time, consulting a computer about your sex life might seem natural, or it might seem absurd). But the company and others like it are beginning to spook large American firms, because they see such half-barmy “innovative” ideas as the key to their own future success.

B. Innovation has become the buzz-word of American management. Firms have found that most of the things that can be outsourced or re-engineered have been (worryingly, by their competitors as well). The stars of American business tend today to be innovators such as Dell, Amazon and Wal-Mart, which have produced ideas or products that have changed their industries.

C. A new book by two consultants from Arthur D. Little records that, over the past 15 years, the top 20% of firms in an annual innovation poll by Fortune magazine have achieved double the shareholder returns of their peers. Much of today's merger boom is driven by a desperate search for new ideas. So is the fortune now spent on licensing and buying others' intellectual property. According to the Pasadena-based Patent & Licence Exchange, trading in intangible assets in the United States has risen from $15 billion in 1990 to $100 billion in 1998, with an increasing proportion of the rewards going to small firms and individuals.

D. And therein lies the terror for big companies: that innovation seems to work best outside them. Several big established "ideas factories", including 3M, Procter & Gamble and Rubbermaid, have had dry spells recently. Gillette spent ten years and $1 billion developing its new Mach 3 razor; it took a British supermarket only a year or so to produce a reasonable imitation. "In the management of creativity, size is your enemy," argues Peter Chemin, who runs the Fox TV and film empire for News Corporation. One person managing 20 movies is never going to be as involved as one doing five movies. He has thus tried to break down the studio into smaller units—even at the risk of incurring higher costs.

E. It is easier for ideas to thrive outside big firms these days. In the past, if a clever scientist had an idea he wanted to commercialise, he would take it first to a big company. Now, with plenty of cheap venture capital, he is more likely to set up on his own. Umagic has already raised $5m and is about to raise $25m more. Even in capital-intensive businesses such as pharmaceuticals, entrepreneurs can conduct early-stage research, selling out to the big firms when they reach expensive, risky clinical trials. Around a third of drug firms' total revenue now comes from licensed-in technology.

F. Some giants, including General Electric and Cisco, have been remarkably successful at snapping up and integrating scores of small companies. But many others — T ^ worry about the prices they have to pay and the difficulty in hanging on to the talent that dreamt up the idea. Everybody would like to develop more ideas in-house. Procter & Gamble is now shifting its entire business focus from countries to products; one aim is to get innovations accepted across the company. Elsewhere, the search for innovation has led to a craze for "intrapreneurship"—devolving power and setting up internal ideas-factories and tracking stocks so that talented staff will not leave.

G. Some people think that such restructuring is not enough. In a new book Clayton Christensen argues that many things which established firms do well, such as looking after their current customers, can hinder the sort of innovative behaviour needed to deal with disruptive technologies. Hence the fashion for cannibalisation—setting up businesses that will actually fight your existing ones. Bank One, for instance, has established Wingspan, an Internet bank that competes with its real branches

(see article). Jack Welch's Internet initiative at General Electric is called "Destroyyourbusiness.com".

H. Nobody could doubt that innovation matters. But need large firms be quite so pessimistic? A recent survey of the top 50 innovations in America, by Industry Week, a journal, suggested that ideas are as likely to come from big firms as from small ones. Another skeptical note is sounded by Amar Bhidé, a colleague of Mr Christensen's at the Harvard Business School and the author of another book on entrepreneurship. Rather than having to reinvent themselves, big companies, he believes, should concentrate on projects with high costs and low uncertainty, leaving those with low costs and high uncertainty to small entrepreneurs. As ideas mature and the risks and rewards become more quantifiable, big companies can adopt them.

I. At Kimberly-Clark, Mr Sanders had to discredit the view that jobs working on new products were for "those who couldn't hack it in the real business." He has tried to change the culture not just by preaching fuzzy concepts but also by introducing hard incentives, such as increasing the rewards for those who come up with successful new ideas and, particularly, not punishing those whose experiments fail. The genesis of one of the firm's current hits, Depend, a more dignified incontinence garment, lay in a previous miss, Kotex Personals, a form of disposable underwear for menstruating women.

J. Will all this creative destruction, cannibalisation and culture tweaking make big firms more creative? David Post, the founder of Umagic, is sceptical: "The only successful intrapreneurs are ones who leave and become entrepreneurs." He also recalls with glee the looks of total incomprehension when he tried to hawk his "virtual experts" idea three years ago to the idea labs of firms such as IBM though, as he cheerfully adds, "of course, they could have been right." Innovation unlike, apparently, sex, parenting and fitness is one area where a computer cannot tell you what to do.

Questions 28-33

The reading Passage has ten paragraphs A-J.

Which paragraph contains the following information?

Write the correct letter A-J, in boxes 28-33 on your answer sheet

NB You may use any letter more than once.

28 Approach to retain best employees

29 Safeguarding expenses on innovative idea

30 Integrating outside firms might produce certain counter effect

31 Example of three famous American companies' innovation

32 Example of one company changing its focus

33 Example of a company resolving financial difficulties itself

Questions 34-37

Do the following statements agree with the information given i n Reading Passage 3? In boxes *34-37* on your answer sheet, write

TRUE *if the statement is true*

FALSE *if the statement is false*

NOT GIVEN *if the information is not given in the passage*

34 Umagic is the most successful innovative company in this new field.

35 Amazon and Wal-Mart exchanged their innovation experience.

36 New idea holder had already been known to take it to small company in the past.

37 IBM failed to understand Umagic's proposal of one new idea.

Questions 38-40

*Choose the correct letter***,** *A, B,* ***c*** *or D.*

Write your answers in boxes 38-40 on your answer sheet.

38 What is author's opinion on the effect of innovation in paragraph c?

A. It only works for big companies

B. Fortune magazine has huge influence globally

C. It is getting more important

D. Effect on American companies is more evident

39 What is Peter Chemin's point of view on innovation?

A. Small company is more innovative than big one

B. Film industry need more innovation than other industries

C. We need to cut the cost when risks occur

D. New ideas are more likely going to big companies

40 What is author's opinion on innovation at the end of this passage?

A. Umagic success lies on the accidental "virtual experts"

B. Innovation is easy and straightforward

C. IBM sets a good example on innovation

D. The author's attitude is uncertain on innovation

Reading Test 28

Section 1

The Beginning of Football

A. Football as we now know it developed in Britain in the 19th century, but the game is far older than this. In fact, the term has historically been applied to games played on foot, as opposed to those played on horseback, so 'football' hasn't always involved kicking a ball. It has generally been played by men, though at the end of the 17th century, games were played between married and single women in a town in Scotland. The married women regularly won.

B. The very earliest form of football for which we have evidence is the 'tsu'chu', which was played in China and may date back 3,000 years. It was performed in front of the Emperor during festivities to mark his birthday. It involved kicking a leather ball through a 30-40cm opening into a small net fixed onto long bamboo canes - a feat that demanded great skill and excellent technique.

C. Another form of the game, also originating from the Far East, was the Japanese 'kemari' which dates from about the fifth century and is still played today. This is a type of circular football game, a more dignified and ceremonious experience requiring certain skills, but not competitive in the way the Chinese game was, nor is there the slightest sign of struggle for possession of the ball. The players had to pass the ball to each other, in a relatively small space, trying not to let it touch the ground.

D. The Romans had a much livelier game, 'harpastum'. Each team member had his own specific tactical assignment took a noisy interest in the proceedings and the score. The role of the feet was so small as scarcely to be of consequence. The game remained popular for 700 or 800 years, but, although it was taken to England, it is doubtful whether it can be considered as a forerunner of contemporary football.

E. The game that flourished in Britain from the 8th to the 19th centuries was substantially different from all the previously known forms - more disorganised, more violent, more spontaneous and usually played by an indefinite number of players. Frequently, the games took the form of a heated contest between whole villages. Kicking opponents was allowed, as in fact was almost everything else.

F. There was tremendous enthusiasm for football, even though the authorities repeatedly intervened to restrict it, as a public nuisance. In the 14th and 15th centuries, England, Scotland and France all made football punishable by law, because of the disorder that commonly accompanied it, or because the well-loved recreation prevented subjects from practising more useful military disciplines. None of these efforts had much effect.

G. The English passion for football was particularly strong in the 16th century, influenced by the popularity of the rather better organised Italian game of 'calcio'. English football was as rough as ever, but it found a prominent supporter in the school headmaster Richard Mulcaster. He pointed out that it had positive educational value and promoted health and strength. Mulcaster claimed that all that was needed was to refine it a little, limit the number of participants in each team and, more importantly, have a referee to oversee the game.

H. The game persisted in a disorganised form until the early 19th century, when a number of influential English schools developed thefr own adaptations. In some, including Rugby School, the ball could be touched with the hands or carried; opponents could be tripped up and even kicked. It was recognised in educational circles that, as a team game, football helped to develop such fine qualities as loyalty, selflessness, cooperation, subordination and deference to the team spirit. A 'games cult' developed in schools, and some form of football became an obligatory part of the curriculum.

I. In 1863, developments reached a climax. At Cambridge University, an initiative began to establish some uniform standards and rules that would be accepted by everyone, but there were essentially two camps: the minority Rugby School and some others - wished to continue with their own form of the game, in particular allowing players to carry the ball. In October of the same year, eleven London clubs and schools sent representatives to establish a set of fundamental rules to govern the matches played amongst them. This meeting marked the both of the Football Association.

J. The dispute concerning kicking and tripping opponents and carrying the ball was discussed thoroughly at this and subsequent meetings, until eventually, on 8 December, the die-hard exponents of the Rugby style withdrew, marking a final split between rugby and football. Within eight years, the Football Association already had 50 member clubs, and the first football competition

in the world was started - the FA Cup.

You should spend about 20 minutes on Questions 1-13 which are based on Reading Passage 1

Questions 1-7

Reading Passage 1 has ten paragraphs A-J.

List of Headings

i Limited success in suppressing the game

i Opposition to the role of football in schools

iii A way of developing moral values

iv Football matches between countries

v A game that has survived

vi Separation into two sports

vii Proposals for minor improvements

vii Attempts to standardise the game

ix Probably not an early version of football

x A chaotic activity with virtually no rules

Choose the correct headings for paragraphs D-Jfrom the list of headings below. Write the correct number i-x in boxes 1-7 on your answer sheet.

Example **Paragraph** C **Answer v**

1 Paragraph D

2 Paragraph E

3 Paragraph F

4 Paragraph G

5 Paragraph H

6 Paragraph I

7 Paragraph J

Questions 8-13

Complete each sentence with the correct ending A-l from the box below. Write the correct letter A-F in boxes 8-13 on your answer sheet.

8 Tsu'chu

9 Kemari

10 Harpastum

11 From the 8th to the 19th centuries, football in the British Isles

12 In the past, the authorities legitimately despised the football and acted on the belief that football

13 When it was accepted in academic settings, football

Section 2

A New Ice Age

A William Curry is a serious, sober climate scientist, not an art critic. But he has spent a lot of time perusing Emanuel Gottlieb Leutze's famous painting "George Washington Crossing the Delaware," which depicts a boatload of colonial American soldiers making their way to attack English and Hessian troops the day after Christmas in 1776. "Most people think these other guys in the boat are rowing, but they are actually pushing the ice away," says Curry, tapping his finger on a reproduction of the painting. Sure enough, the lead oarsman is bashing the frozen river with his boot. "I grew up in Philadelphia. The place in this painting is 30 minutes away by car. I can tell you, this kind of thing just doesn't happen anymore."

B. But it may again soon. And ice-choked scenes, similar to those immortalized by the 16th-century Flemish painter Pieter Brueghel the Elder, may also return to Europe. His works, including the 1565 masterpiece "Hunters in the Snow," make the now-temperate European landscapes look more like Lapland. Such frigid settings were commonplace during a period dating roughly from 1300 to 1850 because much of North America and Europe was in the throes of a little ice age. And now there is mounting evidence that the chill could return. A growing number of scientists believe conditions are ripe for another prolonged cooldown, or small ice age. While no one is predicting a brutal ice sheet like the one that covered the Northern Hemisphere with glacier about 12,000 years ago, the next cooling trend could drop average temperatures 5 degrees Fahrenheit over much of the United States and 10 degrees in the Northeast, northern Europe, and northern Asia.

C. "It could happen in 10 years," says Tenence Joyce, who cha ừ r s the Woods Hole Physical Oceanography Department. "Once it does, it can take hundreds of years to reverse." And he is alarmed that Americans have yet to take the threat seriously.

D. A drop of 5 to 10 degrees entails much more than simply bumping up the thermostat and carrying on. Both economically and ecologically, such quick, persistent chilling could have devastating consequences. A 2002 report titled "Abrupt Climate Change: Inevitable Surprises," produced by the National Academy of Sciences, pegged the cost from agricultural losses alone at $100 billion to $250

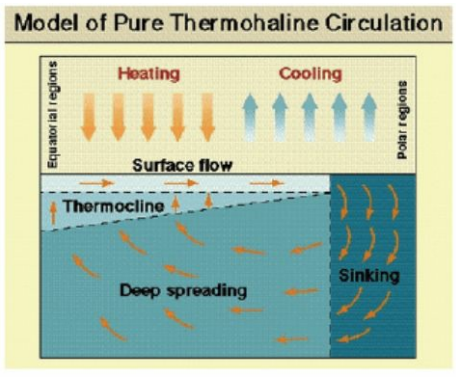
billion while also predicting that damage to ecologies could be vast and incalculable. A grim sampler: disappearing forests, increased housing expenses, dwindling freshwater, lower crop fields and accelerated species extinctions.

E. Political changes since the last ice age could make survival far more difficult for the world's poor. During previous cooling periods, whole tribes simply picked up and moved south, but that option doesn't work in the modem, tense world of closed borders. "To the extent that abrupt climate change may cause rapid and extensive changes of fortune for those who live off the land, the inability to migrate may remove one of the major safety nets for distressed people," says the report.

F. But first things first. Isn't the earth actually warming? Indeed it is, says Joyce. In his cluttered office, full of soft light from the foggy Cape Cod morning, he explains how such warming could actually be the surprising culprit of the next mini-ice age. The paradox is a result of the appearance over the past 30 years in the North Atlantic of huge rivers of freshwater the equivalent of a 10-foot-thick layer mixed into the salty sea. No one is certain where the fresh torrents are coming from, but a prime suspect is meltin į Arctic ice, caused by a buildup of carbon dioxide in the atmosphere that traps solar energy.

G. The freshwater trend is major news in ocean-science circles. Bob Dickson, a British oceanographer who sounded an alarm at a February conference in Honolulu, has termed the drop in salinity and temperature in the Labrador Sea—a body of water between northeastern Canada and Greenland that adjoins the Atlantic—"arguably the largest full-depth changes observed in the modem instrumental oceanographic record." could cause a little ice age by subverting the northern

H. The trend penetration of Gulf Stream waters. Normally, the Gulf Stream, laden with heat soaked up in the tropics, meanders up the east coasts of the United States and Canada. As it flows northward, the stream surrenders heat to the an. Because the prevailing North Atlantic winds blow eastward, a lot of the heat wafts to Europe. That's why many scientists believe winter temperatures on the Continent are as much as 36 degrees Fahrenheit warmer than those in North America at the same latitude. Frigid Boston, for example, lies at almost precisely the same latitude as balmy Rome. And some scientists say the heat also warms Americans and Canadians. "It's a real mistake to think of this solely as a European phenomenon," says Joyce.



I. Having given up its heat to the air, the now-cooler water becomes

denser and sinks into the North Atlantic by a mile or more in a process oceanographers call thermohaline circulation. This massive column of cascading cold is the main engine powering a deepwater current called the Great Ocean Conveyor that snakes through all the world's oceans. But as the North Atlantic fills with freshwater, it grows less dense, making the waters carried northward by the Gulf Stream less able to sink. The new mass of relatively freshwater sits on top of the ocean like a big thermal blanket, threatening the thermohaline circulation. That in turn could make the Gulf Stream slow or veer southward. At some point, the whole system could simply shut down, and do so quickly. "There is increasing evidence that we are getting closer to a transition point, from which we can jump to a new state. Small changes, such as a couple of years of heavy precipitation or melting ice at high latitudes, could yield a big response," says Joyce.

J. "You have all this freshwater sitting at high latitudes, and it can literally take hundreds of years to get rid of it," Joyce says. So while the globe as a whole gets warmer by tiny fractions of 1 degree Fahrenheit annually, the North Atlantic region could, in a decade, get up to 10 degrees colder. What worries researchers at Woods Hole is that history is on the side of rapid shutdown. They know it has happened before.

Question 14-16

Choose the correct letter, A, B, c or D.

Write the correct letter in box 14-16 on your answer sheet.

14 The writer mentions the paintings in the first two paragraphs to illustrate

A that the two paintings are immortalized.

B people's different opinions.

C a possible climate change happened 12,000 years ago.

D the possibility of a small ice age in the future.

15 Why is it hard for the poor to survive the next cooling period?

A because people can't remove themselves from the major safety nets.

B because politicians are voting against the movement,

C because migration seems impossible for the reason of closed borders.

D because climate changes accelerate the process of moving southward.

16 Why is the winter temperature in continental Europe higher than that in North America?

A because heat is brought to Europe with the wind flow.

B because the eastward movement of freshwater continues,

C because Boston and Rome are at the same latitude.

D because the ice formation happens in North America.

Questions 17-21

Match each statement (Questions 17-21) with the correct person A-D in the box below. Write the

correct letter A, B, C or D in boxes 17-21 on your answer sheet.

NB: You may use any letter more than once.

17 A quick climate change wreaks great disruption.

18 Most Americans are not prepared for the next cooling period.

19 A case of a change of ocean water is mentioned in a conference.

20 Global warming urges the appearance of the ice age.

21 The temperature will not drop to the same degree as it used to be.

List of People

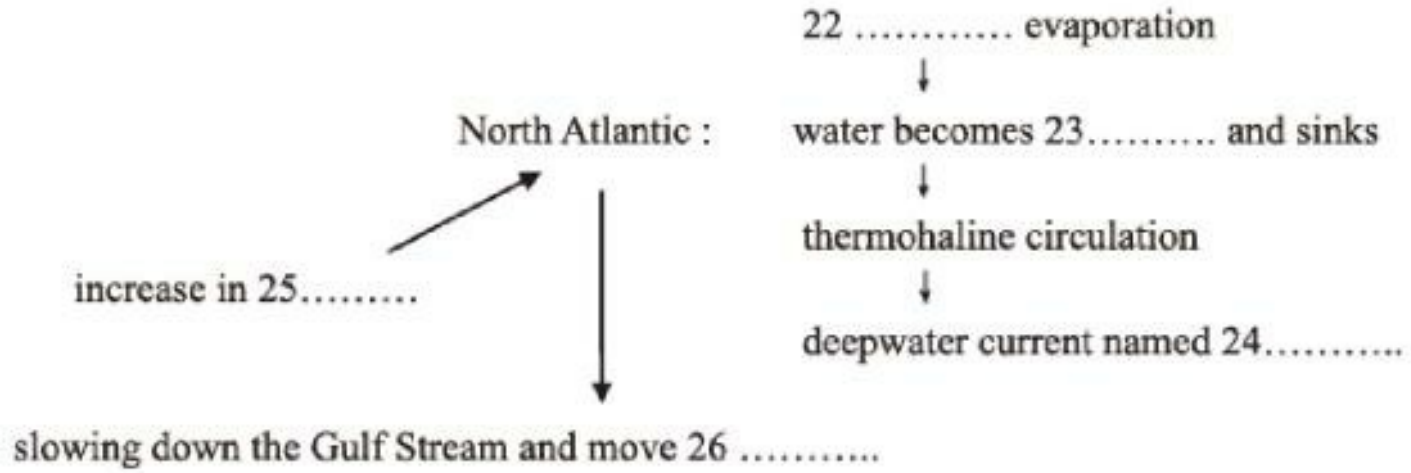
A Bob Dickson B Terrence Joyce C William Curry

D National Academy of Science

Questions 22-26

Complete the flow chart below.

Choose *NO MORE THAN THREE WORDS* from the passage for each answer. *Write your answers in boxes 22-26 on your answer sheet.*


22 ..... evaporation
North Atlantic :
water becomes 23..... and sinks
thermohaline circulation
increase in 25.....
deepwater current named 24.....
slowing down the Gulf Stream and move 26 .....

Section 3

Soviet's New Working Week

Historian investigates how Stalin changed the calendar to keep the Soviet people continually at work.

A. "There are no fortresses that Bolsheviks cannot storm". With these words, Stalin expressed the dynamic self-confidence of the Soviet Union's Five Year Plan: weak and backward Russia was to turn overnight into a powerful modem industrial country. Between 1928 and 1932, production of coal, iron and steel increased at a fantastic rate, and new industrial cities sprang up, along with the world's biggest dam. Everyone's life was affected, as collectivised farming drove millions from the land to swell the industrial proletariat. Private enterprise disappeared in city and country, leaving the State

supreme under the dictatorship of Stalin. Unlimited enthusiasm was the mood of the day, with the Communists believing that iron will and hard-working manpower alone would bring about a new world.

B. Enthusiasm spread to tune itself, in the desire to make the state a huge efficient machine, where not a moment would be wasted, especially in the workplace. Lenin had already been intrigued by the ideas of the American Frederick Winslow Taylor (1856-1915), whose time-motion studies had discovered ways of stream-lining effort so that every worker could produce the maximum. The Bolsheviks were also great admirers of Henry Ford's assembly line mass production and of his Fordson tractors that were imported by the thousands. The engineers who came with them to train their users helped spread what became a real cult of Ford. Emulating and surpassing such capitalist models formed part of the training of the new Soviet Man, a heroic figure whose unlimited capacity for work would benefit everyone in the dynamic new society. All this culminated in the Plan, which has been characterized as the triumph of the machine, where workers would become supremely efficient robot-like creatures.

C. Yet this was Communism whose goals had always included improving the lives of the proletariat. One major step in that direction was the sudden announcement in 1927 that reduced the working day from eight to seven hours. In January 1929, all Indus-tries were ordered to adopt the shorter day by the end of the Plan. Workers were also to have an extra hour off on the eve of Sundays and holidays. Typically though, the state took away more than it gave, for this was part of a scheme to increase production by establishing a three-shift system. This meant that the factories were open day and night and that many had to work at highly undesfrable hours.

D. Hardly had that policy been announced, though, than Yuri Larin, who had been a close associate of Lenin and architect of his radical economic policy, came up with an idea for even greater efficiency. Workers were free and plants were closed on Sundays. Why not abolish that wasted day by instituting a continuous work week so that the machines could operate to their full capacity every day of the week? When Larin presented his idea to the Congress of Soviets in May 1929, no one paid much attention. Soon after, though, he got the ear of Stalin, who approved. Suddenly, in June, the Soviet press was filled with articles praising the new scheme. In August, the Council of Peoples' Commissars ordered that the continuous work week be brought into immediate effect, during the height of enthusiasm for the Plan, whose goals the new schedule seemed guaranteed to forward.

E. The idea seemed simple enough, but turned out to be very complicated in practice. Obviously, the workers couldn't be made to work seven days a week, nor should their total work hours be increased. The Solution was ingenious: a new five-day week would have the workers on the job for four days, with the fifth day free; holidays would be reduced from ten to five, and the extra hour off on the eve of rest days would be abolished. Staggering the rest-days between groups of workers meant that each worker would spend the same number of hours on the job, but the factories would be working a full 360 days a year instead of 300. The 360 divided neatly into 72 five-day weeks. Workers in each establishment (at first factories, then stores and offices) were divided into five groups, each assigned a colour which appeared on the new Uninterrupted Work Week calendars distributed all over the country. Colour-coding was a valuable mnemonic device, since workers might have trouble remembering what their day off was going to be, for it would change every week. A glance at the colour on the calendar would reveal the free day, and allow workers to plan their activities. This system, however, did not apply to construction or seasonal occupations, which followed a six-day week, or to factories or mines which had to close regularly for maintenance: they also had a six-day

week, whether interrupted (with the same day off for everyone) or continuous. In all cases, though, Sunday was treated like any other day.

F. Official propaganda touted the material and cultural benefits of the new scheme. Workers would get more rest; production and employment would increase (for more workers would be needed to keep the factories running continuously); the standard of living would improve. Leisure time would be more rationally employed, for cultural activities (theatre, clubs, sports) would no longer have to be crammed into a weekend, but could flourish every day, with their facilities far less crowded. Shopping would be easier for the same reasons. Ignorance and superstition, as represented by organized religion, would suffer a mortal blow, since 80 per cent of the workers would be on the job on any given Sunday. The only objection concerned the family, where normally more than one member was working: well, the Soviets insisted, the narrow family was far less important than the vast common good and besides, arrangements could be made for husband and wife to share a common schedule. In fact, the regime had long wanted to weaken or sideline the two greatest potential threats to its total dominance: organised religion and the nuclear family. Religion succumbed, but the family, as even Stalin finally had to admit, proved much more resistant.

G. The continuous work week, hailed as a Utopia where time itself was conquered and the sluggish Sunday abolished forever, spread like an epidemic. According to official figures, 63 per cent of industrial workers were so employed by April 1930; in June, all industry was ordered to convert during the next year. The fad reached its peak in October when it affected 73 per cent of workers. In fact, many managers simply claimed that their factories had gone over to the new week, without actually applying it. Conforming to the demands of the Plan was important; practical matters could wait. By then, though, problems were becoming obvious. Most serious (though never officially admitted), the workers hated it. Coordination of family schedules was virtually impossible and usually ignored, so husbands and wives only saw each other before or after work; rest days were empty without any loved ones to share them — even friends were likely to be on a different schedule. Confusion reigned: the new plan was introduced haphazardly, with some factories operating five-, six- and seven-day weeks at the same time, and the workers often not getting their rest days at all.

H. The Soviet government might have ignored all that (It didn’t depend on public approval), but the new week was far from having the vaunted effect on production. With the complicated rotation system, the work teams necessarily found themselves doing different kinds of work in successive weeks. Machines, no longer consistently in the hands of people who knew how to tend them, were often poorly maintained or even broken. Workers lost a sense of responsibility for the special tasks they had normally performed.

I. As a result, the new week started to lose ground. Stalin's speech of June 1931, which criticised the “depersonalised labor” its too hasty application had brought, marked the beginning of the end. In November, the government ordered the widespread adoption of the six-day week, which had its own calendar, with regular breaks on the 6th, 12th, 18th, 24th, and 30th, with Sunday usually as a working day. By July 1935, only 26 per cent of workers still followed the continuous schedule, and the six-day week was soon on its way out. Finally, in 1940, as part of the general reversion to more traditional methods, both the continuous five-day week and the novel six-day week were abandoned, and Sunday returned as the universal day of rest. A bold but typically ill-conceived experiment was at an end.

Questions 27-34

Reading Passage 2 has nine paragraphs A-I.

Choose the correct heading for each paragraph from the list of headings below. Write the correct number I-XII in boxes 27-34 on your answer sheet.

List of Headings

i Benefits of the new scheme and its resistance

ii Making use of the once wasted weekends

iii Cutting work hours for better efficiency

iv Optimism of the great future

v Negative effects on production itself

vi Soviet Union's five year plan

vii The abolishment of the new work-week scheme

viii The Ford model

ix Reaction from factory workers and their families

x The color-coding scheme

xi Establishing a three-shift system

xii Foreign inspiration

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27 Paragraph A

28 Paragraph B

Example *Answer*

Paragraph C *iii*

29 Paragraph D

30 Paragraph E

31 Paragraph F

32 Paragraph G

33 Paragraph H

34 Paragraph I

Questions 35-37

Choose the correct letter A, B, c or D.

Write your answers in boxes 35-37 on your answer sheet.

35 According to paragraph A, Soviet's five year plan was a success because

A Bolsheviks built a strong fortress.

B Russia was weak and backward,

C industrial production increased.

D Stalin was confident about Soviet's potential.

36 Daily working hours were cut from eight to seven to

A improve the lives of all people.

B boost industrial productivity,

C get rid of undesirable work hours.

D change the already establish three-shift work system.

37 Many factory managers claimed to have complied with the demands of the new work week because

A they were pressurized by the state to do so.

B they believed there would not be any practical problems,

C they were able to apply it.

D workers hated the new plan.

Questions 38-40

Answer the questions below using NO MORE THAN TWO WORDS from the passage for each answer.

Write your answers in boxes 38-40 on your answer sheet.

38 Whose idea of continuous work week did Stalin approve and helped to implement?

39 What method was used to help workers to remember the rotation of theft off days?

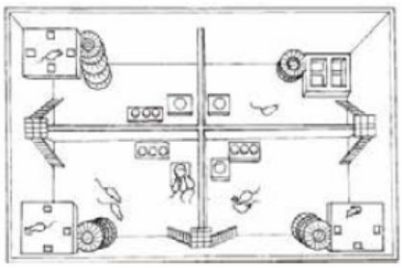
40 What was the most resistant force to the new work week scheme?

Reading Test 29

Section 1

Density and Crowding

A. Of the great myriad of problems which man and the world face today, there are three significant fiends which stand above all others in importance: the uprecedented population growth throughout the world a net increase of 1,400,000 people per week and all of its associations and consequences; the increasing urbanization of these people, so that more and more of them are rushing into cities and urban areas of the world; and the tremendous explosion of communication and social contact throughout the world, so that every part of the world is now aware of every other part. All of these fiends are producing increased crowding and the perception of crowding.



B. It is important to emphasize at the outset that crowding and density are not necessarily the same. Density is the number of individuals per unit area or unit space. It is a simple physical measurement. Crowding is a product of density, communication, contact, and activity. It implies a pressure, a force, and a psychological reaction. It may occur at widely different densities. The frontiersman may have felt crowded when someone built a homestead a mile away. The suburbanite may feel relatively uncrowded in a small house on a half-acre lot if it is surrounded by trees, bushes, and a hedgerow, even though he lives under much higher physical density than did the frontiersman. Hence, crowding is very much a psychological and ecological phenomenon, and not just a physical condition.

C. A classic crowding study was done by Calhoun (1962), who put rats into a physical environment designed to accommodate 50 rats and provided enough food, water, and nesting materials for the number of rats in the environment. The rat population peaked at 80, providing a look at ramped living conditions.

Although the rats experienced no resource limitations other than space restriction, a number of negative conditions developed: the two most dominant males took harems of several female rats and

occupied more than their share of space, leaving other rats even more crowded; many females stopped building nests and abandoned their infant rats; the pregnancy rate declined; infant and adult mortality rates increased; more aggressive and physical attacks occurred; sexual variation increased, including hypersexuality, inhibited sexuality, homosexuality, and bisexuality.

D. Calhoun's results have led to other research on crowding's effects on human beings, and these research findings have suggested that high density is not the single cause of negative effects on humans. When crowding is defined only in terms of spatial density (the amount of space per person), the effects of crowding are variable. However, if crowding is defined in terms of social density, or the number of people who must interact, then crowding better predicts negative psychological and physical effects.

E. There are several reasons why crowding makes US feel uncomfortable. One reason is related to stimulus overload - there are just too many stimuli competing for our attention. We cannot notice or respond to all of them. This feeling is typical of the harried mother, who has several children competing for her attention, while she is on the phone and the doorbell is ringing. This leaves her feeling confused, fatigued and yearning to withdraw from the situation. There are strong feelings of a lack of privacy - being unable to pay attention to what you want without being repeatedly interrupted or observed by others.

F. Field studies done in a variety of settings illustrate that social density is associated with negative effects on human beings. In prison studies, males generally became more aggressive with increases in density. In male prison, inmate; living in conditions of higher densities were more likely to suffer from fight. Males rated themselves as more aggressive in small rooms (a situation of high spatial density), whilst the females rated themselves as more aggressive in large rooms (Stokols et al., 1973). These differences relate to the different personal space requirements of the genders. Besides, Baum and Greenberg found that high density leads to decreased attraction, both physical attraction and liking towards others and it appears to have gender differences in the impact that density has on attraction levels, with males experiencing a more extreme reaction. Also, the greater the density is, the less the helping behavior. One reason why the level of helping behavior may be reduced in crowded situations links to the concept of diffusion of responsibility. The more people that are present in a situation that requires help, the less often help is given. This may be due to the fact that people diffuse responsibility among themselves with no-one feeling that they ought to be the one to help.

G. Facing all these problems, what are we going to do with them? The more control a person has over the crowded environment the less negatively they experience it, thus the perceived crowding is less (Schmidt and Keating). The ability to cope with crowding is also influenced by the relationship the individual has with the other people in the situation. The high density will be interpreted less negatively if the individual experiences it with people he likes. One of the main coping strategies employed to limit the impact of high density is social withdrawal. This includes behaviors

such as averting the gaze and using negative body language to attempt to block any potential intrusions.

You should spend about 20 minutes on question 1-13, which are based on reading passage 1 on the following pages.

Questions 1-7

Reading passage 1 has seven paragraphs, A-G

Choose the correct heading for paragraphs A -G from the list of headings below.

Write the correct number, i-x, in boxes 1-7 on your answer sheet.

List of headings

i Other experiments following Calhoun's experiment offering a clearer indication

ii The effects of crowding on people in the social scope

iii Psychological reaction to crowding

iv Problems that result in crowding

v Responsibility does not work

vi What cause the upset feel of crowding

vii Definitions of crowding and density

viii Advice for crowded work environment

ix Difference between male and females' attractiveness in a crowd X Nature and results of Calboun's experiment

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1 Paragraph A

2 Paragraph B

3 Paragraph **c**

4 Paragraph D

5 Paragraph E

6 Paragraph F

7 Paragraph G

Questions 8-13

Complete the sentences below.

Choose NO MORE THAN THREE WORDS from the passage for each answer. Write your answers in boxes 8-13 on your answer sheet.

8 Being disturbed repeatedly, the harried mother feels frustrated for the lack of .....

9 Inmates in high density settings were more aggressive in……

10 The different result between male and female is associated with the varying need of.....

11 Especially for male, Baum and Greenberg found that .....declined with high density.

12 The idea of responsibility diffusion may explain a person's reluctant to.....

13 Schmidt and Keating suggest that if more.....was present there would be a reduction in crowding stress.

Section 2

The reconstruction of community in Talbot Park, Auckland

A. An architecture of disguise is almost complete at Talbot Park in the heart of Auckland's Glen Innes. The place was once described as a state housing ghetto, rife with crime, vandalism and other social problems. But today after a $48 million urban renewal makeover, the site is home to 700 residents — 200 more than before — and has people regularly inquiring whether they can buy or rent there. "It doesn't look like social housing," Housing New Zealand housing services manager Dene Busby says of the tidy brick and weatherboard apartments and townhouses which would look just as much at home in "there is no reason why public housing should look cheap in my view," says Design Group architect Neil of the eight three-bedroom terrace houses his firm designed.

B. Talbot Park is a triangle of government-owned land bounded by Apirana Ave, Pilkington Rd and Point England Rd. In the early 1960s it was developed for state housing built around a linear park that ran through the middle. Initially, there was a strong sense of a family-friendly community. Former residents recall how the Talbot Park reserve played a big part in their childhoods — a place where the kids in the block came together to play softball, cricket, tiggy, leapfrog and bullrush. Sometimes they'd play "Maoris against Pakehas" but without any animosity. "It was all just good fun", says Georgie Thompson in Ben Schrader's We Call it Home: A History of State Housing in New Zealand. "We had respect for our neighbours and addressed them by title Mr. and Mrs. so-and-so," she recalls.

C. Quite what went wrong with Talbot Park is not clear. We call it Home Records that the community began to change in the late 1970s as more Pacific Islanders and Europeans moved in. The new arrivals didn't readily integrate with the community, a "them and us" mentality developed, and residents interacted with their neighbours less. What was clear was the buildings were deteriorating and becoming dilapidated, petty crime was on the rise and the reserve — focus of fond childhood memories — had become a wasteland and was considered unsafe.

D. But it wasn't until 2002 that Housing New Zealand decided the properties needed upgrading. The master renewal plan didn't take advantage of the maximum accommodation

density allowable (one unit per 100 sq metres) but did increase density to one emit per 180 sq m by refurbishing all 108 star flat units, removing the multis and building 111 new home. The Talbot strategy can be summed up as mix, match and manage. Mix up the housing with variety plans from a mix of architects, match house styles to what[7] s built by the private sector, match tenants to the mix, and manage their occupancy. Inevitably cost comes into the equation." If you're going to build low cost homes, you've got to keep them simple and you can't afford a fancy bit on them. " says Michael Thompson of *Architectus* which designed the innovative three-level Atrium apartments lining two sides of a covered courtyard. At $300,000 per two bedroom unit, the building is more expensive but provides for independent disabled accommodation as well as offering solar hot water heating and rainwater collection for toilet cisterns and outside taps.

E. The renewal project budget at $1.5 million which will provide park pathways, planting, playgrounds, drinking fountains, seating, skateboard rails, a half-size basketball hard court, and a pavilion. But if there was any doubt this is a low socio-economic area, the demographics for the surrounding Tamaki area are sobering. Of the 5000 households there, 55 per cent are state houses, 28 per cent privately owned (compared to about 65 per cent nationally) and 17 per cent are private rental. The area has a high concentration of households with incomes in the $5000 to $15,000 range and very few with an income over $70,000. That's in sharp contrast to the more affluent suburbs like Kohimarama and St John's that surround the area.

F. "The design is for people with different culture background," says architect James Lunday of Common Ground which designed the 21 large family homes. "Architecturally we decided to be relatively conservative — nice house in its own garden with a bit of space and good indoor outdoor flow." There's a slight reflection of the whare and a Pacific fale, but not overplayed "The private sector is way behind in urban design and sustainable futures," says Bracey. "Redesigning sheets and parks is a big deal and very difficult to do. The private sector won't do it, because It's so hard."

G. There's no doubt good urban design and good architecture play a significant part in the scheme. But probably more important is a new standard of social control. Housing New Zealand calls it "intensive tenancy management". Others view it as social engineering. "It's a model that we are looking at going forward," according to Housing New Zealand's central Auckland regional manager Graham Bodman.[1] The focus is on frequent inspections, helping tenants to get to know each other and trying to create an environment of respect for neighbours, " says Bodman. That includes some strict rules — no loud parties after 10 pm, no dogs, no cats in the apartments, no washing hung over balcony rails and a requirement to mow lawns and keep the property tidy. Housing New Zealand has also been active in organising morning teas and sheet barbecues for residents to meet their neighbours. *"IV*s all based on the intensification," says Community Renewal project manager Stuart Bracey. "We acknowledge if you are going to put more people living closer together, you have to actually help them to live closer together because it creates tension — especially for people that aren't used to it."

Questions 14-20

Reading Passage 2 has seven paragraphs, A-G.

Choose the correct heading for paragraphs, A-G from the list below. Write the correct number, i-x, in boxes 14-20 on your answer sheet.

List of Headings

i Financial hardship of community

ii A good tendency of strengthening the supervision

iii Details of plans for the community's makeover and upgrade

iv Architecture suits families of various ethnic origins

v Problems arise then the mentality of alienation developed later

vi Introduction of a social housing community with unexpected high standard

vii A practical design and need assist and cooperate in future

viii closer relationship among neighbors in original site

ix different need from a makeup of a low financial background should be considered

x How to make the community feel safe

xi a plan with details for house structure

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14 Paragraph A

15 Paragraph B

16 Paragraph c

17 Paragraph D

18 Paragraph E

19 Paragraph F

20 Paragraph G

Questions 21-23

List of people

A Michael Thompson

B Graham Bodman

C Stuart Bracey

D James Lunday

E Dene Busby

Use the information in the passage to match the people (listed A-E) with opinions or deeds below. Write the appropriate letters, A-E, in boxes 21-23 on your answer sheet.

21 Design should meet the need of mix-raced cultural background

22 for better living environment, regulations and social control should be imperative

23 organising more community's activities helps strengthening relationship in community

Questions 24-27

Complete the folbwing summary of the paragraphs of Reading Passage 2 Choose NO MORE THAN TWO WORDS from the passage for each answer. Write your answers in boxes 24-27 on your answer sheet.

In the year 2002, the Talbot decided to raise housing standard, yet the plan was to build homes go much beyond the accommodation limit and people complain about the high living 24..... And as the variety plans were complemented under the designs of many 25.....together, made house styles go with the part designed by individuals, matched tenants from different culture. As for the finance, reconstruction program's major concern is to build a house within low 26.....; finally, just as expert predicted residents will agree on builbing a relatively conventional house in its own 27....., which provides considerable space to move around.

Section 3

You should spend about 20 minutes on Questions 27-40, which are based on reading passage III below.

Video Game's Unexpected Benefits to Human Brain

A. James Paul Gee, professor of education at the University of Wisconsin-Madison, played his first video game years ago when his six-year-old son Sam was playing Pajama Sam: No Need to Hide When It's Dark Outside. He wanted to play the game so he could support Sam's problem solving. Though Pajama Sam is not an "educational game", it is replete with the types of problems psychologists study when they study thinking and learning. When he saw how well the game held Sam's attention, he wondered what sort of beast a more mature video game might be.

B. Video and computer games, like many other popular, entertaining and addicting kid's activities, are looked down upon by many parents as time-wasters, and worse, parents think that these games rot the brain. Violent video games are readily blamed by the media and some experts as the reason why some youth become violent or commit extreme anti-social behavior. Recent content analyses of video games show that as many as 89% of games contain some violent content, but there is no form of aggressive content for 70% of popular games. Many scientists and psychologists, like James Paul Gee, find that video games actually have many benefits - the main one being making kids smart. Video games may actually teach kids high-level thinking skills that they will need in the future.

C. "Video games change your brain," according to University of Wisconsin psychologist Shawn Green. Video games change the brain's physical structure the same way as do learning to read, playing the piano, or navigating using a map. Much like exercise can build muscle, the powerful combination of concentration and rewarding surges of neurotransmitters like dopamine, which strengthens neural circuits, can build the player's brain.

D. Video games give your child's brain a real workout. In many video games, the skills requ ŭ ed to win involve abstract and high level thinking. These skills are not even taught at school. Some of the mental skills trained by video games include: following instructions, problem solving, logic, hand-eye coordination, fine motor and spatial skills. Research also suggests that people can learn iconic, spatial, and visual attention skills from video games. There have been even studies with adults showing that experience with video games is related to better surgical skills. Jacob Benjamin, doctor from Beth Israel Medical Center NY, found a direct link between skill at video gaming and skill at keyhole or laparoscopic surgery. Also, a reason given by experts as to why fighter pilots of today are more skillful is that this generation's pilots are being weaned on video games.

E. The players learn to manage resources that are limited, and decide the best use of resources, the same way as in real life. In strategy games, for instance, while developing a city, an unexpected surprise like an enemy might emerge. This forces the player to be flexible and quickly change tactics. Sometimes the player does this almost every second of the game giving the brain a real workout. According to researchers at the University of Rochester, led by Daphne Bavelier, a cognitive scientist, games simulating stressful events such as those found in battle or action games could be a training tool for real-world situations. The study suggests that playing action video games primes the brain to make quick decisions. Video games can be used to train soldiers and surgeons, according to the study. Steven Johnson, author of Everything Bad is Good For You: How Today's Popular Culture, says gamers must deal with immediate problems while keeping their long-term goals on their horizon. Young gamers force themselves to read to get instructions, follow storylines of games, and get information from the game texts.

F. James Paul Gee, professor of education at the University of Wisconsin-Madison, says that playing a video game is similar to working through a science problem. Like students in a laboratory, gamers must come up with a hypothesis. For example, players in some games constantly try out combinations of weapons and powers to use to defeat an enemy. If one does not work, they change hypothesis and try the next one. Video games are goal-driven experiences, says Gee, which are fundamental to learning. Also, using math skills is important to win in many games that involve quantitative analysis like managing resources. In higher levels of a game, players usually fail the first time around, but they keep on trying until they succeed and move on to the next level.

G. Many games are played online and involve cooperation with other online players in order to win. Video and computer games also help children gain self-confidence and many games are based on history, city building, and governance and so on. Such games indirectly teach children about aspects of life on earth.

H. In an upcoming study in the journal Current Biology, authors Daphne Bavelier, Alexandre Pouget, and **C.** Shawn Green report that video games could provide a potent training regimen for speeding up reactions in many types of real-life situations. The researchers tested dozens of 18- to 25-year-olds who were not ordinarily video game players. They split the subjects into two groups. One group played 50 hours of the fast-paced action video games "Call of Duty 2" and "Unreal Tournament," and the other group played 50 hours of the slow-moving strategy game "The Sims 2." After this training period, all of the subjects were asked to make quick decisions in several tasks designed by the researchers. The action game players were up to 25 percent faster at coming to a conclusion and answered just as many questions correctly as their strategy game playing peers.

Questions 28-31

Choose the correct letter, A, B, c or D.

Write your answers in boxes 28-31 on your answer sheet.

28 What is the main purpose of paragraph *ONE*?

A. Introduction of professor James Paul Gee.

B. Introduction of the video game: Pajamas Sam.

C. Introduction of types of video games.

D. Introduction of the background of this passage.

29 What does the author want to express in the *second* paragraph?

A. Video games are widely considered harmful for children's brain.

B. Most violent video games are the direct reason of juvenile delinquency,

C. Even there is a certain proportion of violence in most video games; scientists and psychologists see its benefits of children's intellectual abilities.

D Many parents regard video games as time-wasters, which rot children's brain.

30 What is correctly mentioned in paragraph *four?*

A Some schools use video games to teach students abstract and high level thinking.

B Video games improves the brain ability in various aspects,

C Some surgeons have better skills because they play more video games.

D Skillful fighter pilots in this generation love to paly video games.

31 What is the expectation of the experiment the three researchers did?

A Gamers have to make the best use of the limited resource.

B Gamers with better math skills will win in the end.

C Strategy game players have better ability to make quick decisions.

D Video games help increase the speed of players' reaction effectively.

Questions 32-35

Do the following statements agree with the information given in Reading Passage 3? In boxes 32-35 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

32 Most video games are popular because of their violent content.

33 The action game players minimized the percentage of making mistakes in the experiment.

34 It would be a good idea for schools to apply video games in their classrooms.

35 Those people who are addicted to video games have lots of dopamine in their brains.

Questions 36-40

Use the information in the passage to match the people (listed A-F) with opinions or deeds below. Write the appropriate letters A-F in boxes 36-40 on your answer sheet.

A The writer's opinion B James Paul Gee **C** Shawn Green

D Daphne Bavelier E Steven Johnson F Jacob Benjamin

36 Video games as other daily life skills alter the brain's physical structure.

37 Brain is ready to make decisions without hesitation when players are immersed in playing stressful games.

38 The purpose-motivated experience that video games offer plays an essential role in studying.

39 Players are good at tackling prompt issues with future intensions.

40 It helps children broaden their horizon in many aspects and gain self-confidence.

Reading Test 30

Section 1

Lie Detector

A. However much we may abhor it, deception comes naturally to all living things. Birds do it by feigning injury to lead hungry predators away from nesting young. Spider crabs do it by disguise: adorning themselves with strips of kelp and other debris, they pretend to be something they are not-and so escape their enemies. Nature amply rewards successful deceivers by allowing them to survive long enough to mate and reproduce. So it may come as no surprise to learn that human beings-who, according to psychologist Gerald Jellison of the University of South California, are lied to about 200 times a day, roughly one untruth every five minutes—often deceive for exactly the same reasons: to save their own skins or to get something they can't get by other means.

B. But knowing how to catch deceit can be just as important a survival skill as knowing how to tell a lie and get away with it. A person able to spot falsehood quickly is unlikely to be swindled by an unscrupulous business associate or hoodwinked by a devious spouse. Luckily, nature provides more than enough clues to trap dissemblers in then own tangled webs-if you know where to look. By closely observing facial expressions, body language and tone of voice, practically anyone can recognize the telltale signs of lying. Researchers are even programming computers-like those used on Lie Detector-to get at the truth by analyzing the same physical cues available to the naked eye and ear. "With the proper training, many people can learn to reliably detect lies," says Paul Ekman, professor of psychology at the University of California, San Francisco, who has spent the past 15 years studying the secret art of **deception.**

C. In order to know what kind of lies work best, successful liars need to accurately assess other people's emotional states. Ekman's research shows that this same emotional intelligence is essential for good lie detectors, too. The emotional state to watch out for is stress, the conflict most liars feel between the truth and what they actually say and do.

D. Even high-tech lie detectors don't detect lies as such; they merely detect the physical cues of emotions, which may or may not correspond to what the person being tested is saying. Polygraphs, for instance, measure respiration, heart rate and skin conductivity, which tend to increase when people are nervous as they usually are when lying. Nervous people typically perspire, and the salts contained in perspiration conduct electricity. That's why a sudden leap in skin

conductivity indicates nervousness about getting caught, perhaps? -- which might, in turn, suggest that someone is being economical with the truth. On the other hand, it might also mean that the lights in the television studio are too hot-which is one reason polygraph tests are inadmissible in court. "Good lie detectors don't rely on a single sign," Ekman says, "but interpret clusters of verbal and nonverbal clues that suggest someone might be lying."

E. Those clues are written all over the face. Because the musculature of the face is directly connected to the areas of the brain that process emotion, the countenance can be a window to the soul. Neurological studies even suggest that genuine emotions travel different pathways through the brain than insincere ones. If a patient paralyzed by stroke on one side of the face, for example, is asked to smile deliberately, only the mobile side of the mouth is raised. But tell that same person a funny joke, and the patient breaks into a full and spontaneous smile. Very few people-most notably, actors and politicians-are able to consciously control all of their facial expressions. Lies can often be caught when the liar's true feelings briefly leak through the mask of deception. "We don't think before we feel," Ekman says. "Expressions tend to show up on the face before we're even conscious of experiencing an emotion."

F. One of the most difficult facial expressions to fake—or conceal, if it is genuinely felt—is sadness. When someone is truly sad, the forehead wrinkles with grief and the inner comers of the eyebrows are pulled up. Fewer than 15% of the people Ekman tested were able to produce this eyebrow movement voluntarily. By contrast, the lowering of the eyebrows associated with an angry scowl can be replicated at will by almost everybody. "If someone claims they are sad and the inner comers of their eyebrows don't go up," Ekman says, "the sadness is probably false."

G. The smile, on the other hand, is one of the easiest facial expressions to counterfeit. It takes just two muscles-the zygomaticus major muscles that extend from the cheekbones to the comers of the lips-to produce a grin. But there's a catch. A genuine smile affects not only the comers of the lips but also the orbicularis oculi, the muscle around the eye that produces the distinctive "crow's-feet" associated with people who laugh a lot. A counterfeit grin can be unmasked if the lip comers go up, the eyes crinkle but the inner comers of the eyebrows are not lowered, a movement controlled by the orbicularis oculi that is difficult to fake. The absence of lowered eyebrows is one reason why false smiles look so strained and stiff.

Questions 1-5

Do the following statements agree with the information given in Reading Passage 1? In boxes 1-5 on your answer sheet, write

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if the information is not given in the passage*

1 All living animals can lie.

2 Some people tell lies for self-preservation.

3 The fact of lying is more important than detecting one.

4 Researchers are using equipment to study which part of the brain is responsible for telling lies.

5 To be a good liar, one has to understand other people’s emotions.

Questions 6-9

*Choose the correct letter. A, B, **c** or D.*

Write the correct letter in box 6-9 on your answer sheet.

6 How does a lie-detector work?

A It analyzes one's verbal response to a question.

B It records the changes in one's facial expression,

C It illustrates the reasons about the emotional change when one is tested.

D It monitors several physical reactions in the person undergoing the test.

7 Why couldn't lie detectors be used in a court of law?

A because the nonverbal clues are misleading.

B because there could be other causes of a certain change in the equipment,

C because the lights are too hot.

D because the statistic data on the lie detectors are not accurate.

8 The writer quotes from the paralyzed patients

A to exemplify people's response to true feelings.

B to show the pathways for patients to recover,

C to demonstrate the paralyzed patient's ability to smile.

D to emphasize that the patient is in a state of stroke.

9 According to the passage, politicians

A can express themselves clearly.

B are good at masking their emotions,

C are conscious of the surroundings.

D can think before action.

Questions 10-13

Classify the following facial traits as referring to

A Happiness

B Anger

C Sadness

Write the correct letter A, B, C or D in boxes 10-13 on your answer sheet.

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10 Lines formed above eyebrows

11 Movement from muscle that orbits the eye

12 Eyebrows down

13 Inner comer of eyebrows raised

Section 2

Leaf-Cutting Ants and Fungus

A. The ants and then agriculture have been extensively studied over the years, but the recent research has uncovered intriguing new findings about the fungus they cultivate, how they domesticated it and how they cultivate it and preserve it from pathogens. For example, the fungus farms, which the ants were thought to keep free of pathogens, turn out to be vulnerable to a devastating mold, found nowhere else but in ants' nests. To keep the mold in check, the ants long ago made a discovery that would do credit to any pharmaceutical laboratory

B. Leaf-cutting ants and then fungus farms are a marvel of nature and perhaps the best known example of symbiosis, the mutual dependence of two species. The ants' achievement is remarkable - the biologist Edward o. Wilson has called it "one of the major breakthroughs in animal evolution" — because it allows them to eat, courtesy of their mushroom's digestive powers, the otherwise poisoned harvest of tropical forests whose leaves are laden with terpenoids, alkaloids and other chemicals designed to sicken browsers.

C. Fungus growing seems to have originated only once in evolution, because all gardening ants belong to a single tribe, the descendants of the first fungus farmer. There are more than 200 known species of the attine ant tribe, divided into 12 groups, or genera. The leaf-cutters use fresh vegetation; the other groups, known as the lower attines because their nests are smaller and their techniques more primitive, feed their gardens with detritus like dead leaves, insects and feces.

D. The leaf-cutters' fungus was indeed descended from a single strain, propagated clonally, or just by budding, for at least 23 million years. But the lower attine ants used different varieties of the fungus, and in one case a quite separate species, the four biologists discovered. The pure strain of fungus grown by the leaf-cutters, it seemed to Mr. Currie, resembled the monocultures of various human crops, that are very productive for a while and then succumb to some disastrous pathogen, such as the Irish potato blight. Monocultures, which lack the genetic diversity to respond to changing environmental threats, are sitting ducks for parasites. Mr.

Currie felt there had to be a parasite in the ant-fungus system. But a century of ant research offered no support for the idea. Textbooks describe how leaf-cutter ants scrupulously weed their gardens of all foreign organisms. "People kept telling me, 'You know the ants keep then gardens free of parasites, don't you?'" Mr. Currie said of his efforts to find a hidden interloper.

E. But after three years of sifting through attine ant gardens, Mr. Currie discovered they are far from free of infections. In last month's issue of the Proceedings of the National Academy of Sciences, he and two colleagues, Dr. Mueller and David Mairoch, isolated several alien organisms, particularly a family of parasitic molds called Escovopsis.

F. Escovopsis turns out to be a highly virulent pathogen that can devastate a fungus garden in a couple of days. It blooms like a white cloud, with the garden dimly visible underneath. In a day or two the whole garden is enveloped. "Other ants won't go near it and the ants associated with the garden just

starve to death," Dr. Rehner said. "They just seem to give up, except for those that have rescued their larvae." The deadly mold then turns greenish-brown as it enters its spore-forming stage.

G. Evidently the ants usually manage to keep Escovopsis and other parasites under control. But with any lapse in control, or if the ants are removed, Escovopsis will quickly burst forth. Although new leaf-cutter gardens start off free of Escovopsis, within two years some 60 percent become infected. The discovery of Escovopsis's role brings a new level of understanding to the evolution of the attine ants. "In the last decade, evolutionary biologists have been increasingly aware of the role of parasites as driving forces in evolution," Dr. Schultz said. There is now a possible reason to explain why the lower attine species keep changing the variety of fungus in their mushroom gardens, and occasionally domesticating new ones — to stay one step ahead of the relentless Escovopsis.

H. Interestingly, Mr. Currie found that the leaf-cutters had in general fewer alien molds in their gardens than the lower attines, yet they had more Escovopsis infections. It seems that the price they pay for cultivating a pure variety of fungus is a higher risk from Escovopsis. But the leaf-cutters may have little alternative: they cultivate a special variety of fungus which, unlike those grown by the lower attines, produces nutritious swollen tips for the ants to eat.

I. Discovery of a third partner in the ant-fungus symbiosis raises the question of how the attine ants, especially the leaf-cutters, keep this dangerous interloper under control. Amazingly enough, Mr. Currie has again provided the answer. "People have known for a hundred years that ants have a whitish growth on the cuticle," said Dr. Mueller, referring to the insects' body surface. "People would say this is like a cuticular wax. But Cameron was the first one in a hundred years to put these things under a microscope. He saw it was not inert wax. It is alive." Mr. Currie discovered a specialized patch on the ants' cuticle that harbors a particular kind of bacterium, one well known to the pharmaceutical industry, because it is the source of half the antibiotics used in medicine. From each of 22 species of attine ant studied, Mr. Cameron and colleagues isolated a species of Streptomyces bacterium, they reported in Nature in April. The Streptomyces does not have much effect on ordinary laboratory funguses. But it is a potent poisoner of Escovopsis, inhibiting its growth and suppressing spore formation. It also stimulates growth of the ants' mushroom fungus. The bacterium is carried by virgin queens when they leave to establish new nests, but is not found on male ants, playboys who take no responsibility in nest-making or gardening.

J. Because both the leaf-cutters and the lower attines use Streptomyces, the bacterium may have been part of their symbiosis for almost as long as the Escovopsis mold. If so, some Alexander Fleming of an ant discovered antibiotics millions of years before people did. Even now, the ants are accomplishing two feats beyond the powers of human technology. The leaf-cutters are growing a monocultural crop year after year without disaster, and they are using an antibiotic apparently so wisely and prudently that, unlike people, they are not provoking antibiotic resistance in the target pathogen.

Questions 14-19

Use the information in the passage to match the options (listed A-C) with activities or features of ants below. Write the appropriate letters A-C in boxes 14-19 on your answer sheet.

NB: you may use any letter more than once

14 Build small nests and live with different foreign fungus.

15 Use toxic leaves to feed fungus o

16 Raise fungus which don't live with other foreingers.

17 Use substance to fight against escovopsis.

18 Use dead vegetable to feed fungus.

19 Are free of parasites explained previously.

Questions 20-24

*The reading Passage has ten paragraphs **A-J.***

Which paragraph contains the following information?

*Write the correct letter **A-J,** in boxes **20-24** on your answer sheet.*

20 Dangerous outcome of Escovopsis.

21 Disadvantage of growing single fungus.

22 Comparison of features of two different nests.

23 Two achievements made by ants earlier than human.

24 Advantage of growing new breed of fungus.

Questions 25-26

Choose the correct letter, A, B, c or D.

Write your answers in boxes 25-26 on your answer sheet.

25 How does author think of *Currie's* opinion?

A. his viewpoint was verified later.

B. earlier study has sufficient evidence,

C. no details mentioned in article.

D his opinion was proved to be wrong.

26 What did scientists find on the skin of ants under microscope?

A. some white cloud mold embed in their skin

B. that Wax is all over their skin,

C. a substance which is useful to humans.

D. a substance which suppresses growth of fungus.

Section3

Save Endangered Language

"Obviously we must do some serious rethinking of our priorities, lest linguistics go down in history as the only science that presided obviously over the disappearance of 90 percent of the very field to which It is dedicated." - Michael Krauss, The World's Languages in Crisis "

A. Ten years ago Michael Krauss sent a shudder through the discipline of linguistics with his prediction that half the 6,000 or so languages spoken in the world would cease to be uttered within a century. Unless scientists and community leaders directed a worldwide effort to stabilize the decline of local languages, he warned, nine tenths of the linguistic diversity of humankind would probably be doomed to extinction. Krauss's prediction was little more than an educated guess, but other respected linguists had been clanging out similar alarms. Keneth L. Hale of the Massachusetts Institute of Technology noted in the same journal issue that eight languages on which he bad done fieldwork had since passed into extinction. A 1990 survey in Australia found that 70 of the 90 surviving Aboriginal languages were no longer used regularly by all age groups. The same was true for all but 20 of the 175 Native American languages spoken or remembered in the US., Krauss told a congressional panel in 1992.

B. Many experts in the field mourn the loss of rare languages, for several reasons. To start, there is scientific self-interest; some of the most basic questions in linguistics have to do with the limits of human speech, which are far from fully explored. Many researchers would like to know which structural elements of grammar and vocabulary—if any—are truly universal and probably therefore hardwired into the human brain. Other scientists try to reconstruct ancient migration patterns

by comparing borrowed words that appear in otherwise unrelated languages, in each of these cases, the wider the portfolio of languages you study, the more likely you are to get the right answers.

C. Despite the near constant buzz in linguistics about endangered languages over the past 10 years, the field has accomplished depressingly little. "You would think that there would be some organized response to this dire situation' some attempt to determine which language can be saved and which should be documented before they disappear, says Sarah G. Thomason, a linguist at the University of Michigan at Ann Arbor. "But there isn't any such effort organized in the profession. It is only recently that it has become fashionable enough to work on endangered languages." Six years ago, recalls Douglas H. Whalen of Yale University, "when I asked linguists who was raising money to deal with these problems, I mostly got blank stares." So Whalen and a few other linguists founded the Endangered Languages Fund. In the five years to 2001 they were able to collect only $80,000 for research grants. A similar foundation in England, directed by Nicholas Ostler, has raised just $8,000 since 1995.

D. But there are encouraging signs that the field has turned a comer. The Volkswagen Foundation, a German charity, just issued its second round of grants totaling more than $2 million. It has created a

multimedia archive at the Max Planck Institute for Psycholinguistics in the Netherlands that can house recordings, grammars, dictionaries and other data on endangered languages. To fill the archive, the foundation has dispatched field linguists to document Aweti (100 or so speakers in Brazil), Ega (about 300 speakers in Ivory Coast), Waima'a (a few hundred speakers in East Timor), and a dozen or so other languages unlikely to survive the century. The Ford Foundation has also edged into the arena. Its contributions helped to reinvigorate a master-apprentice program created in 1992 by Leanne Hinton of Berkeley and Native Americans worried about the imminent demise of about 50 indigenous languages in California. Fluent speakers receive $3,000 to teach a younger relative (who is also paid) their native tongue through 360 hours of shared activities, spread over six months. So far about 5 teams have completed the program, Hinton says, transmitting at least some knowledge of 25 languages. "It's too early to call this language revitalization," Hinton admits. "In California the death rate of elderly speakers will always be greater than the recruitment rate of young speakers. But at least we prolong the survival of the language." That will give linguists more time to record these tongues before they vanish.

E. But the master-apprentice approach hasn't caught on outside the U.S., and Hinton's effort is a drop in the sea. At least 440 languages have been reduced to a mere handful of elders, according to the Ethnologue, a catalogue of languages produced by the Dallas-based group SIL International that comes closest to global coverage. For the vast majority of these languages, there is little or no record of their grammar, vocabulary, pronunciation or use in daily life. Even if a language has been fully documented, all that remains once it vanishes from active use is a fossil skeleton, a scattering of features that the scientist was lucky and astute enough to capture. Linguists may be able to sketch an outline of the forgotten language and fix its place on the evolutionary tree, but little more. "How did people start conversations and talk to babies? How did husbands and wives converse?" Hinton asks. "Those are the first things you want to learn when you want to revitalize the language."

F. But there is as yet no discipline of "conservation linguistics," as there is for biology. Almost every strategy tried so far has succeeded in some places but failed in others, and there seems to be no way to predict with certainty what will work where. Twenty years ago in New Zealand, Maori speakers set up "language nests," in which preschoolers were immersed in the native language. Additional Maori-only classes were added as the children progressed through elementary and secondary school. A similar approach was tried in Hawaii, with some success—the number of native speakers has stabilized at 1,000 or so, reports Joseph E. Grimes of SIL International, who is working on Oahu. Students can now get instruction in Hawaiian all the way through university.

G One factor that always seems to occur in the demise of a language is that the speakers begin to have collective doubts about the usefulness of language loyalty. Once they start regarding their own language as inferior to the majority language, people stop using it for all situations. Kids pick up on the attitude and prefer the dominant language. In many cases, people don't notice until they suddenly realize that their kids never speak the language, even at home. This is how Cornish and some dialects

of Scottish Gaelic is still only rarely used for daily home life in Ireland, 80 years after the republic was founded with Irish as its first official language.

H. Linguists agree that ultimately, the answer to the problem of language extinction is multilingualism. Even uneducated people can learn several languages, as long as they start as children. Indeed, most people in the world speak more than one tongue, and in places such as Cameroon (279 languages), Papua New Guinea (823) and India (387) it is common to speak three or four distinct languages and a dialect or two as well. Most Americans and Canadians, to the west of Quebec, have a gut reaction that anyone speaking another language in front of them is committing an immoral act. You get the same reaction in Australia and Russia. It is no coincidence that these are the areas where languages are disappearing the fastest. The first step in saving dying languages is to persuade the world's majorities to allow the minorities among them to speak with theft own voices.

Questions 27-33

The reading passage has eight paragraphs, A-H

Choose the correct heading for paragraphs A-H from the list below.

Write the correct number, i-xi, in boxes 27-33 on your answer sheet.

List of Headings

i data consistency needed for language

ii consensus on an initiative recommendation for saving dying out languages

iii positive gains for protection

iv minimum requirement for saving a language

v Potential threat to minority language

vi a period when there was absent of real effort made.

vii native language programs launched

viii Lack in confidence in young speakers as a negative factor

ix Practise in several developing countries

x Value of minority language to linguists. ***xi*** government participation in language field

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27 Paragraph A

28 Paragraph B

Example: Paragraph C ***vi***

29 Paragraph D

30 Paragraph E

31 Paragraph F

32 Paragraph G

33 Paragraph H

Questions 34-38

Use the information in the passage to match the people (listed A-F) with opinions or deeds below. Write the appropriate letters A-F in boxes 34-38 on your answer sheet.

A Nicholas Ostler

B Michael Krauss

C Joseph E. Grimes

D Sarah G. Thomason

E Keneth L. Hale

F Douglas H. Whalen

---

34 Reported language conservation practice in Hawaii

35 Predicted that many languages would disappear soon

36 Experienced process that languages die out personally

37 Raised language fund in England

38 Not enough effort on saving until recent work

Questions 39-40

*Choose the correct letter, A, **B, c** or **D.***

Write your answers in boxes 39-40 on your answer sheet.

39 What is real result of ***master-apprentice program*** sponsored by ***The Ford Foundation***?

A Teach children how to speak

B Revive some endangered languages in California

C postpone the dying date for some endangered languages

D Increase communication between students

40 What should majority language speakers do according to the **last paragraph?**

A They should teach their children endangered language in free lessons

B They should learn at least four languages

C They should show their loyalty to a dying language

D They should be more tolerant to minority language speaker

Reading Test 31

Section 1

Food for thought 2

A. There are not enough classrooms at the Msekeni primary school, so half the lessons take place in the shade of yellow-blossomed acacia trees. Given this shortage, it might seem odd that one of the school's purpose-built classrooms has been emptied of pupils and turned into a storeroom for sacks of grain. But it makes sense. Food matters more than shelter.

B. Msekeni is in one of the poorer parts of Malawi, a landlocked southern African country of exceptional beauty and great poverty. No war lays waste Malawi, nor is the land unusually crowded or infertile, but Malawians still have trouble finding enough to eat. Half of the children under five are underfed to the point of stunting. Hunger blights most aspects of Malawian life, so the country is as good a place as any to investigate how nutrition affects development, and vice versa.

C. The headmaster at Msekeni, Bernard Kumanda, has strong views on the subject. He thinks food is a priceless teaching aid. Since 1999, his pupils have received free school lunches. Donors such as the World Food Programme (WFP) provide the food: those sacks of grain (mostly mixed maize and soyabean flour, enriched with vitamin A) in that converted classroom. Local volunteers do the cooking—turning the dry ingredients into a bland but nutritious slop, and spooning it out on to plastic plates. The children line up in large crowds, cheerfully singing a song called "We are getting porridge".

D. When the school's feeding programme was introduced, enrolment at Msekeni doubled. Some of the new pupils had switched from nearby schools that did not give out free porridge, but most were children whose families had previously kept them at home to work. These families were so pool that the long-term benefits of education seemed unattractive when set against the short-term gain of sending children out to gather firewood or help in the fields. One plate of porridge a day completely altered the calculation A child fed at school will not howl so plaintively for food at home. Girls, who are more likely than boys to be kept out of school, are given extra snacks to take home.

E. When a school takes in a horde of extra students from the poorest homes, you would expect standards to drop. Anywhere in the world, poor kids tend to perform worse than their better-off classmates. When the influx of new pupils is not accompanied by any increase in the number of teachers, as was the case at Msekeni, you would expect standards to fall even further. But they have

not Pass rates at Msekenl improved dramatically, from 30% to 65%. Although this was an exceptional example, the nationwide results of school feeding programmes were still pretty good. On average, after a Malawian school started handing out free food it attracted 38% more girls and 24% more boys. The pass rate for boys stayed about die same, while for girls it improved by *93%.*

F. Better nutrition makes for brighter children. Most immediately, well-fed children find it easier to concentrate. It is hard to focus the mind on long division when your stomach is screaming for food. Mr Kumanda says that it used to be easy to spot the kids who were really undernourished. "They were the ones who stared into space and didn?t respond when you asked them questions," he says. More crucially, though, more and better food helps brains grow and develop. Like any other organ in the body, the brain needs nutrition and exercise. But if it is starved of the necessary calories, proteins and micronutrients. It Is stunted, perhaps not as severely as a muscle would be, but stunted nonetheless. That is why feeding children at schools works so well. And the fact that the effect of feeding was more pronounced on girls than on boys gives a clue to who eats first In rural Malawian households. It isn't the girls.

G. On a global scale, the good news Is that people are eating better than ever before. Homo sapiens has grown 50% bigger since the industrial revolution. Three centuries ago, chronic malnutrition was more or less universal. Now, it Is extremely rare in rich countries. In developing countries, where most people live, plates and rice bowls are also fuller than ever before. The proportion of children under five in the developing world who are malnourished to the point of stunting fell from 39% in 1990 to 30% in 2000, says the World Health Organisation (WHO). In other places, the battle against hunger is steadily being won. Better nutrition is making people cleverer and more energetic, which will help them grow more prosperous. And when they eventually join the ranks of the well off, they can start fretting about growing too fat.

Questions 1-7

The reading passage has seven paragraphs, A-G

Choose the correct heading for paragraphs A-G from the list below. Write the correct number, i-xi, in boxes 1-7 on your answer sheet.

List of Headings

i Why better food helps students' learning

ii A song for getting porridge

iii Surprising use of school premises

iv Global perspective

V Brains can be starved

vi Surprising academics outcome

vii Girls are specially treated in the program

viii How food program is operated

ix How food program affects school attendance X None of the usual reasons

xi How to maintain academic standard

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1 Paragraph A

2 Paragraph B

3 Paragraph **c**

4 Paragraph D

5 Paragraph E

6 Paragraph F

7 Paragraph G

Questions 8-11

Complete the sentences below using NO MORE THAN TWO WORDS AND/OR A NUMBER from the passage?

Write your answers in boxes 8-11 on your answer sheet

8 _____are exclusively offered to girls in the feeding programme.

9 Instead of going to school, many children in poverty are sent to collect _____in the fields.

10 The pass rate at Msekeni has risen to _____with the help of the feeding programme.

11 Since the industrial revolution, the size of the modern human has grown by_____

Questions 12-13

Choose TWO letters, A-F.

Write your answers in boxes 12 and 13 on your answer sheet.

Which TWO of the following statements are true?

A Some children are taught in the open air.

B Malawi have trouble to feed its large population.

C. No new staffs were recruited when attendance rose.

D Girls enjoy a higher status than boys in the family

E Boys and girls experience the same improvement in the pass rate.

F WHO has cooperated with WFP to provide grain to the school at Msekeni.

Section 2

Saving the British Bitterns

A. Breeding bitterns became extinct in the UK by 1886 but, following re-colonisation early last century, numbers rose to a peak of about 70 booming (singing) males in the 1950s, falling to fewer than 20 by the 1990s. In the late 1980s it was clear that the bittern was in trouble, but there was little information on which to base recovery actions.

B. Bitterns have cryptic plumage and a shy nature, usually remaining hidden within the cover of reedbed vegetation. Our first challenge was to develop standard methods to monitor their numbers. The boom of the male bittern is its most distinctive feature during the breeding season, and we developed a method to count them using the sound patterns unique to each individual. This not only allows **US** to be much more certain of the number of booming males in the UK, but also enables us to estimate local survival of males from one year to the next.

C. Our first direct understanding of the habitat needs of breeding bitterns came from comparisons of reedbedsites that had lost their booming birds with those that retained them. This research showed that bitterns had been retained in reedbeds where the natural process of succession, or drying out, had been slowed through management. Based on this work, broad recommendations on how to manage and rehabilitate reedbeds for bitterns were made, and funding was provided through the EU LIFE Fund to manage 13 sites within the core breeding range. This project, though led by the RSPB, involved many other organisations.

D. To refine these recommendations and provide fine-scale, quantitative habitat prescriptions on the bitterns' preferred feeding habitat, we radio-tracked male bitterns on the RSPB's Minsmere and Leighton Moss reserves. This showed clear preferences for feeding in the wetter reedbed margins, particularly within the reedbed next to larger open pools. The average home range sizes of the male bitterns we followed (about 20 hectares) provided a good indication of the area of reedbed needed when managing or creating habitat for this species. Female bitterns undertake all the incubation and care of the young, so it was important to understand then needs as well. Over the course of our research, we located 87 bittern nests and found that female bitterns preferred to nest in areas of continuous vegetation, well into the reedbed, but where water was still present during the driest part of the breeding season.

E. The success of the habitat prescriptions developed from this research has been spectacular. For instance, at Minsmere, booming bittern numbers gradually increased from one to 10 following reedbed lowering, a management technique designed to halt the drying out process.

After a low point of 11 booming males in 1997, bittern numbers in Britain responded to all the habitat management work and started to increase for the first time since the 1950s.

F. The final phase of research involved understanding the diet, survival and dispersal of bittern chicks. To do this we fitted small radio tags to young bittern chicks in the nest, to determine their fate through to fledgingand beyond. Many chicks did not survive to fledging and starvation was found to be the most likely reason for their demise. The fish prey fed to chicks was dominated by those species penetrating into the reed edge. So, an important element of recent studies (including a PhD with the University of Hull) has been the development of recommendations on habitat and water conditions to promote healthy native fish populations.

G. Once independent, radio-tagged young bitterns were found to seek out new sites during their first winter; a proportion of these would remain on new sites to breed if the conditions were suitable. A second EU LIFE funded project aims to provide these suitable sites in new areas. A network of 19 sites developed through this partnership project will secure a more sustainable UK bittern population with successful breeding outside of the core area, less vulnerable to chance events and sea level rise.

H. By 2004, the number of booming male bitterns in the UK had increased to 55, with almost all of the increase being on those sites undertaking management based on advice derived from our research. Although science has been at the core of the bittern story, success has only been achieved through the trust, hard work and dedication of all the managers, owners and wardens of sites that have implemented, in some cases very drastic, management to secure the future of this wetland species in the UK. The constructed bunds and five major **sluices** now control the water level over 82 ha, with a further 50 ha coming under control in the winter of 2005/06. Reed establishment has principally used natural regeneration or planted seedlings to provide small core areas that will in time expand to create a bigger reed area. To date nearly 275,000 seedlings have been planted and reed cover is extensive. Over 3 km of new ditches have been formed, 3.7 km of existing ditch have been re-profiled and 2.2 km of old meander (former estuarine

features) have been cleaned out.

I. Bitterns now regularly winter on the site with some indication that they are staying longer into the spring. No breeding has yet occurred but a booming male was present in the spring of 2004. A range of **wildfowl** breed, as well as a good number of reedbed passerines including reed bunting, reed, sedge and grasshopper warblers. Numbers of wintering shoveler have increased so that the site now holds a UK important wintering population. Malltraeth Reserve now forms part of the UK network of key sites for water vole (a UK priority species) and 12 monitoring transectshave been established. Otter and brown-hare occur on the site as does the rare plant, pillwort.

Questions14-20

The reading passage has seven paragraphs, A-H

List of Headings

i research findings into habitats and decisions made

ii fluctuation in bittern number

iii protect the young bittern

iv international cooperation works

v Began in calculation of the number

vi importance of food

vii Research has been successful.

viii research into the reedbed

ix reserve established holding bittern in winter

Choose the correct heading for paragraphs A-Hfrom the list below. Write the correct number, i-viii, in boxes 14-20 on your answer sheet.

14 Paragraph A

15 Paragraph B

16 Paragraph C

17 Paragraph D

18 Paragraph F

19 Paragraph G

20 Paragraph H

Questions 21-26

Answer the questions below.

Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the passage for each answer.

21 When did the bird of bitten reach its peak of number?

22 What does the author describe the bittern's character?

23 What is the main cause for the chick bittern's death?

24 What is the main food for chick bittern?

25 What system does it secure the stability for bittern's population?

26 Besides bittern and rare vegetation, what mammal does the protection plan benefit?

Questions 27

*Choose the correct letter, A, B, **C** or D.*

Write your answers in boxes 27 on your answer sheet.

27 What is the main purpose of this passage?

A Main characteristic of a bird called bittern.

B Cooperation can protect an endangered species,

C The difficulty of access information of bittern's habitat and diet.

D To save wetland and reedbed in UK.

Section 3

E- training

A. E-leaming is the unifying term to describe the fields of online learning, web-based training, and technology-delivered instruction, which can be a great benefit to corporate e-learning. IBM, for instance, claims that the institution of its e-training program, Basic Blue, whose purpose is to train new managers, saved the company in the range of $200 million in 1999. Cutting the travel expenses required to bring employees and instructors to a central classroom accounts for the lion's share of the savings. With an online course, employees can learn from any Internet-connected PC, anywhere in the world. Ernst and Young reduced training costs by 35 percent while improving consistency and scalability.

B. In addition to generally positive economic benefits, other advantages such as convenience, standardized delivery, self-paced learning, and variety of available content, have made e-learning a high priority for many corporations. E-learning is widely believed to offer flexible "any time, any place" learning. The claim for "any place" is valid in principle and is a great development. Many people can engage with rich learning materials that simply were not possible in a paper or broadcast distance learning era. For teaching specific information and skills, e-training holds great promise. It can be especially effective at helping employees prepare for IT certification programs. E-learning also seems to effectively address topics such as sexual harassment education,' safety training and management training — all areas where a clear set of objectives can be identified. Ultimately, training experts recommend a "blended" approach that combines both online and in-person framing as the instruction requires. E-learning is not an end-all solution. But if it helps decrease costs and windowless classrooms filled with snoring students, it definitely has its advantages.

C. Much of the discussion about implementing e-learning has focused on the technology, but as Driscoll and others have reminded us, e-learning is not just about the technology, but also many human factors. As any capable manager knows, teaching employees new skills is critical to a smoothly run business. Having said that, however, the traditional route of classroom instruction runs the risk of being expensive, slow and, often times, ineffective. Perhaps the classroom's greatest disadvantage is the fact that it takes employees out of their jobs. Every minute an employee is sitting in a classroom training session is a minute they're not out on the floor working. It now looks as

if there is a way to circumvent these traditional training drawbacks. E-training promises more effective teaching techniques by integrating audio, video, animation, text and interactive materials with the intent of teaching each student at his or her own pace. In addition to higher performance results, there are other immediate benefits to students such as increased time on task, higher levels of motivation, and reduced test anxiety for many learners. A California State University Northridge study reported that e-learners performed 20 percent better than traditional learners. Nelson reported a significant difference between the mean grades of 406 university students earned in traditional and distance education classes, where the distance learners outperformed the traditional learners.

D. On the other hand, nobody said E-training technology would be cheap. E-training service providers, on the average, charge from $10,000 to $60,000 to develop one hour of online instruction. This price varies depending on the complexity of the training topic and the media used. HTML pages are a little cheaper to develop while streaming-video presentations or flash animations cost more. Course content is just the starting place for cost. A complete e-learning solution also includes the technology platform (the computers, applications and network connections that are used to deliver the courses). This technology platform, known as a learning management system (LMS), can either be installed onsite or outsourced. Add to that cost the necessary investments in network bandwidth to deliver multimedia courses, and you're left holding one heck of a bill. For the LMS infrastructure and a dozen or so online courses, costs can top $500,000 in the first year. These kinds of costs mean that custom e-training is, for the time being, an option only for large organizations. For those companies that have a large enough staff, the e-training concept pays for itself. Aware of this fact, large companies are investing heavily in online training. Today, over half of the 400-plus courses that Rockwell Collins offers are delivered instantly to its clients in an e-learning format/ a change that has reduced its annual training costs by 40%. Many other success stories exist

E. E-learning isn't expected to replace the classroom entirely. For one thing, bandwidth limitations are still an Issue in presenting multimedia over the Internet Futhermore, e-training isn't suited to every mode of instruction or topic. For instance, it's rather ineffective impasting cultural values or building teams. If your company has a unique corporate culture it would be difficult to convey that to first time employees through a computer monitor. Group training sessions are more ideal for these purposes. In addition, there is a perceived loss of research time because of the work involved in developing and teaching online classes. Professor Wallin estimated that It required between 500 and 1000 person-hours, that is, Wallin-hours, to keep the course at the appropriate level of currency and usefulness, (Distance learning instructors often need technical skills, no matter how advanced the courseware system.) That amounts to between a quarter and half of a person-year. Finally, teaching materials require computer literacy and access to equipment Any e-Learning system Involves basic equipment and a minimum level of computer knowledge in order to perform the tasks required by the system. A student that does not possess these skills, or have access to these tools, cannot succeed in an e-Learning program.

F. While few people debate the obvious advantages of e-learning, systematic research is needed to confirm that learners are actually acquiring and using -the skills that are being taught online, and that

e-learning is the best way to achieve the outcomes in a corporate environment. Nowadays, a go-between style of the *Blended learning,* which refers to a mixing of different learning environments, is gaining popularity. It combines traditional face-to-face classroom methods with more modem computer-mediated activities. According to its proponents, the strategy creates a more integrated approach for both instructors and learners. Formerly, technology-based materials played a supporting role to face-to-face instruction. Through a blended learning approach, technology will be more important

Questions 28-33

The reading passage has seven paragraphs, A-F.

Choose the correct heading for paragraphs A-F from the list below. Write the correct number, i-xi, in boxes 28-33 on your answer sheet.

List of Headings

i overview of the benefits for the application of E-training

ii IBM's successful choice of training

iii Future direction and a new style of teaching

iv learners' achievement and advanced teaching materials

v limitations when E-training compares with traditional class

vi multimedia over the Internet can be a solution

vii technology can be a huge financial burden

viii the distance learners outperformed the traditional university learners in worldwide

ix other advantages besides economic consideration

x Training offered to help people learn using computers

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28 Paragraph A

29 Paragraph B

30 Paragraph c

31 Paragraph D

32 Paragraph E

33 Paragraph F

Questions 34-37

The reading Passage has seven paragraphs A-F.

Which paragraph contains the following information?

Write the correct letter *A-F,* in boxes *35-37* on your answer sheet.

34 Projected Basic Blue in IBM achieved a great success.

35 E-learning wins as a priority for many corporations as its flexibility.

36 The combination of the traditional and c-training environments may prevail.

37 Example of a fast electronic delivery for a company's products to its customers.

Questions 38-40

*Choose **Three** correct letters, among A-E*

Write your answers in boxes 38-40 on your answer sheet.

A. Technical facilities are hardly obtained.

B. Presenting multimedia over the Internet is restricted due to the bandwidth limit,

C. It is ineffective imparting a unique corporate value to fresh employees.

D. Employees need block a long time leaving their position attending training.

E. More preparation time is needed to keep the course at the suitable level.

Reading Test 32

Section 1

Animal minds: Parrot Alex

A. In 1977 Irene Pepperberg, a recent graduate of Harvard University, did something very bold. At a time when animals still were considered automatons, she set out to find what was on another creature's mind by talking to it. She brought a one-year-old African gray parrot she named Alex into her lab to teach him to reproduce the sounds of the English language. "I thought if he learned to communicate, I could ask him questions about how he sees the world."

B. When Pepperberg began her dialogue with Alex, who died last September at the age of 31, many scientists believed animals were incapable of any thought. They were simply machines, robots programmed to react to stimuli but lacking the ability to think or feel. Any pet owner would disagree. We see the love in our dogs' eyes and know that, of course, they has thoughts and emotions. But such claims remain highly controversial. Gut instinct is not science, and it is all too easy to project human thoughts and feelings onto another creature. How, then, does a scientist prove that an animal is capable of thinking—that it is able to acquire information about the world and act on it? "That's why I started my studies with Aex," Pepperberg said. They were seated—she at her desk, he on top of his cage—in her lab, a windowless room about the size of a boxcar, at Brandeis University. Newspapers lined the floor; baskets of bright toys were stacked on the shelves. They were clearly a team—and because of their work, the notion that animals can think is no longer so fanciful.

C. Certain skills are considered key signs of higher mental abilities: good memory, a grasp of grammar and symbols, self-awareness, understanding others' motives, imitating others, and being creative. Bit by bit, in ingenious experiments, researchers have documented these talents in other species, gradually chipping away at what we thought made human beings distinctive while offering a glimpse of where our own abilities came from. Scrub jays know that other jays are thieves and that stashed food can spoil; sheep can recognize faces; chimpanzees use a variety of tools to probe termite mounds and even use weapons to hunt small mammals; dolphins can imitate human postures; the archerfish, which stuns insects with a sudden blast of water, can learn how to aim its squirt simply by watching an experienced fish perform the task. And Alex the parrot turned out to be a surprisingly good talker.

D. Thirty years after the Alex studies began; Pepperberg and a changing collection of assistants were still giving him English lessons. The humans, along with two younger parrots, also served as Alex's flock, providing the social input all parrots crave. Like any flock, this one —as small as it was—had its share of drama. Alex dominated his fellow parrots, acted huffy at times around Pepperberg, tolerated the other female humans, and fell to pieces over a male assistant who dropped by for a visit. Pepperberg bought Alex in a Chicago pet store where she let the store's assistant pick him out because she didn't want other scientists saying later that she'd particularly chosen an especially smart

bird for her work. Given that Alex's brain was the size of a shelled walnut, most researchers thought

Pepperberg's interspecies communication study would be futile.

E. "Some people actually called me crazy for trying this," she said. "Scientists thought that chimpanzees were better subjects, although, of course, chimps can't speak." Chimpanzees, bonobos, and gorillas have been taught to use sign language and symbols to communicate with US, often with impressive results. The bonobo Kanzi, for instance, carries his symbol-communication board with him so he can "talk" to his human researchers, and he has invented combinations of symbols to express his thoughts. Nevertheless, this is not the same thing as having an animal look up at you, open his mouth, and speak. Under Pepperberg's patient tutelage, Alex learned how to use his vocal tract to imitate almost one hundred English words, including the sounds for various foods, although he calls an apple a "banerry." "Apples taste a little bit like bananas to him, and they look a little bit like cherries, so Alex made up that word for them," Pepperberg said.

F. It sounded a bit mad, the idea of a b ŭ d having lessons to practice, and willingly doing it. But after listening to and observing Alex, it was difficult to argue with Pepperberg's explanation for his behaviors. She wasn't handing him treats for the repetitious work or rapping him on the claws to make him say the sounds. "He has to hear the words over and over before he can correctly imitate them," Pepperberg said, after pronouncing "seven" for Alex a good dozen times in a row. "I'm not trying to see if Alex can learn a human language," she added. "That's never been the point. My plan always was to use his imitative skills to get a better understanding of avian cognition."

G. In other words, because Alex was able to produce a close approximation of the sounds of some English words, Pepperberg could ask him questions about a bird's basic understanding of the world. She couldn't ask him what he was thinking about, but she could ask him about his knowledge of numbers, shapes, and colors. To demonstrate, Pepperberg carried Alex on her arm to a tall wooden perch in the middle of the room. She then retrieved a green key and a small green cup from a basket on a shelf. She held up the two items to Alex's eye. "What's same?" she asked. Without hesitation, Alex's beak opened: "Color." "What's different?" Pepperberg asked. "Shape," Alex said. His voice had the digitized sound of a cartoon character. Since parrots lack lips (another reason it was difficult for Alex to pronounce some sounds, such as ba), the words seemed to come from the air around him, as if a ventriloquist were speaking. But the words—and what can only be called the thoughts—were entirely his.

H. For the next 20 minutes, Alex ran through his tests, distinguishing colors, shapes, sizes, and

materials (wool versus wood versus metal). He did some simple arithmetic, such as counting the yellow toy blocks among a pile of mixed hues. And, then, as if to offer final proof of the mind inside his bird's brain, Alex spoke up. "Talk clearly!" he commanded, when one of the younger birds Pepperberg was also teaching talked with wrong pronunciation. "Talk clearly!" "Don't be a smart aleck," Pepperberg said, shaking her head at him. "He knows all this, and he gets bored, so he interrupts the others, or he gives the wrong answer just to be obstinate. At this stage, he's like a teenager; he's moody, and I'm never sure what he'll do."

Questions 1-6

Do the following statements agree with the information given in Reading Passage 1? In boxes 1-6 on your answer sheet, write

TRUE	*if the statement is true*
FALSE	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

1 Firstly, *Alex* has grasped quite a lot of vocabulary.

2 At the beginning of study, *Alex* felt frightened in the presence of humans.

3 Previously, many scientists realized that animals possess the ability of thinking.

4 It has taken a long time before people get to know cognition existing in animals.

5 As *Alex* could approximately imitate the sounds of English words, he was capable J of roughly answering Irene's questions regarding the world.

6 By breaking in other parrots as well as producing the incorrect answers, he tried to be focused.

Questions 7-10

Complete the following summary of the paragraphs of Reading

Passage, using no more than three words from the Reading Passage for each answer.

Write your answers in boxes 7-10 on your answer sheet.

After the framing of Irene, Parrot Alex can use his vocal tract to pronounce more than____7_____, while other scientists believe that animals have no this advanced ability of thinking, they would rather teach_____8____. Pepperberg clarified that she wanted to conduct a study concerning_____9____but not to teach him to talk. The store's assistant picked out a bird at random for her for the sake of avoiding other scientists saying that the bird is ____10_____afterwards.

Questions 11-13

Answer the questions 11-13 below.

Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the passage for each answer.

11. What did Alex reply regarding the similarity of the subjects showed to him?
12. What is the problem of the young parrots except Alex?
13. To some extent, through the way he behaved what we can call him?

Section 2

stealth Forces in weight Loss

The field of weight loss is like the ancient fable about the blind men and the elephant. Each man investigates a different part of the animal and reports back, only to discover their findings are bafflingly incompatible.

A. The various findings by public-health experts, physicians, psychologists, geneticists, molecular biologists, and nutritionists are about as similar as an elephant's tusk is to its tail Some say obesity is largely predetermined by our genes and biology; others attribute it to an overabundance of fries, soda, and screen-sucking; still others think we're fat because of viral infection, insulin, or the metabolic conditions we encountered in the womb. "Everyone subscribes to their own little theory," says Robert Berkowitz, medical director of the Center for Weight and Eating Disorders at the University of Pennsylvania School of Medicine. We're programmed to hang onto the fat we have, and some people are predisposed to create and carry more fat than others. Diet and exercise help, but in the end the solution will inevitably be more complicated than pushing away the plate and going for a walk. "It's not as simple as 'You're fat because you're lazy,'" says Nikhil Dhurandhar, an associate professor at Pennington Biomedical Research Center in Baton Rouge. "Willpower is not a prerogative of thin people. It's distributed equally."

B. Science may still be years away from giving US a miracle formula for fat-loss. hormone leptin is a crucial player in the brain's weight-management circuitry Some people produce too little leptin; others become desensitized to it. And when obese people lose weight, their leptin levels plummet along with their metabolism. The body becomes more efficient at using fuel and conserving fat, which makes it tough to keep the weight off. Obese dieters' bodies go into a state of chronic hunger, a feeling Rudolph Leibel, an obesity researcher at Columbia University, compares to thirst. "Some people might be able to tolerate chronic thirst, but the majority couldn't stand it," says Leibel "Is that a behavioral problem—a lack of willpower? I don't think so."

C. The government has tong espoused moderate daily exercise—of the evening-walk or take-the-stairs variety—but that may not do much to budge the needle on the scale. A 150-pound person burns only 150 calories on a half-hour walk, the equivalent of two apples. It's good for the heart, less so for the gut "Radical changes are necessary," says Deirdre Barrett, a psychologist at Harvard Medical School and author of Waistland "People don't lose weight by choosing the small fries or taking a little walk every other day." Barrett suggests taking a cue from the members of the

National Weight Control Registry (NWCR), a self-selected group of more than 5,000 successful weight-losers who have shed an average of 66 pounds and kept it off 5.5 years. Some registry members lost weight using tow-carb diets; some went low-fat; others eliminated refined foods. Some did it on their own; others relied on counseling. That said, not everyone can lose 66 pounds and not everyone needs to. The goal shouldn't be getting thin, but getting healthy. It's enough to whittle your weight down to the tow end of your set range, says Jeffrey Friedman, a geneticist at Rockefeller University. Losing even 10 pounds vastly decreases your risk of diabetes, heart disease, and high blood pressure. The point is to not give up just because you don't took like a swimsuit model.

D. The negotiation between your genes and the environment begins on day one. Your optimal weight, writ by genes, appears to get edited early on by conditions even before birth, inside the womb. If a woman has high blood-sugar levels while she's pregnant, her children are more likely to be overweight or obese, according to a study of almost 10,000 mother-child pairs. Maternal diabetes may influence a child's obesity risk through a process called metabolic imprinting, says Teresa Hillier, an endocrinologist with Kaiser Permanente's Center for Health Research and the study's lead author. The implication is clear: Weight may be established very early on, and obesity largely passed from mother to child Numerous studies in both animals and humans have shown that a mother's obesity directly increases her child's risk for weight gain. The best advice for moms-to-be: Get fit before you get pregnant. You'll reduce your risk of complications during pregnancy and increase your chances of having a normal-weight child

E. It's the $64,000 question: Which diets work? It got people wondering: Isn't there a better way to diet? A study seemed to offer an answer. The paper compared two groups of adults: those who, after eating, secreted high levels of insulin, a hormone that sweeps blood sugar out of the bloodstream and promotes its storage as fat, and those who secreted less. Within each group, half were put on a tow-fat diet and half on a tow-glycemic-toad diet. On average, the tow-insulin-secreting group fared the same on both diets, losing nearly 10 pounds in the first six months — but they gained about half of it back by the end of the 18-month study. The high-insulin group didn't do as well on the tow-fat plan, losing about 4.5 pounds, and gaining back more than half by the end But the most successful were the high- insulin-secretors on the low-glycemic-toad diet. They lost nearly 13 pounds and kept it off.

F. What if your fat is caused not by diet or genes, but by germs—say, a virus? It sounds like a sci-fi horror movie, but research suggests some dimension of the obesity epidemic may be attributable to infection by common viruses, says Dhurandhar. The idea of “infectobesity” came to him 20 years ago when he was a young doctor treating obesity in Bombay. He discovered that a local avian virus, SMAM-1, caused chickens to die, sickened with organ damage but also, strangely, with tots of abdominal fat. In experiments, Dhurandhar found that SMAM-l-infected chickens became obese on the same diet as uninfected ones, which stayed svelte.

G. He later moved to the U.S. and onto a bona fide human virus, adenovirus 36 (AD-36). In the lab, every species of animal Dhurandhar infected with the virus became obese—chickens got fat, mice got fat, even rhesus monkeys at the zoo that picked up the virus from the environment suddenly gained 15 percent of their body weight upon exposure. In his latest studies, Dhurandhar has isolated a gene that, when blocked from expressing itself, seems to turn off the virus's fattening power. Stem cells extracted from fat cells and then exposed to AD-36 reliably blossom into fat cells—but when stem cells are exposed to an AD-36 virus with the key gene inhibited, the stems cells don’t differentiate. The gene appears to be necessary and sufficient to trigger AD-36-related obesity, and the goal is to

use the research to create a sort of obesity vaccine.

Researchers have discovered 10 microbes so far that trigger obesity—seven of them viruses. It may be a long shot, but for people struggling desperately to be thin, even the possibility of an alternative cause of obesity offers some solace. "They feel better knowing there may be something beyond them that could be responsible," says Dhurandhar. "The thought that there could be something besides what they've heard all their lives—that they are greedy and lazy—helps."

Questions 14-18

Reading Passage 2 has five sections, A-G.

Which section contains the following information? Write the correct letter, A-Q in boxes 14-18 on your answer sheet.

NB You may use any letter more than once.

14 evaluation on the effect of weight loss on different kind of diets

15 an example of research which include relatives of participants

16 Example of a group of people who never regain weight immediately after.

17 tong term hunger may appear to be acceptable to most of the participants while losing weight

18 a continuous experiment may bad to a practical application besides diet or hereditary resort.

Questions 19-23

Look at the following researchers and the list of findings below. Match each researcher with the correct finding.

Write the correct letter in boxes 19-23 on your answer sheet.

List of Researchers

A Robert Berkowitz

B Rudolph Leibel

C Nikhil Dhurandhar

D Deirdre Barrett

E Jeffrey Friedman

F Teresa Hillier

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19 A person's weight is predetermined to a set point by the DNA.

20 Pregnant mother who are overweight may risk their fetus

21 The aim of losing Wright should be keeping healthy rather than attractiveness

22 mall changes in lifestyle will not have great impact on reducing much weight

23 Researchers should be divided into different groups with their own point of view about weight

loss.

Questions 24-27

Complete the summery below.

Choose NO MORE THAN ONE WORD from the passage for each answer. Write your answers in boxes 24-27 on your answer sheet.

In Bombay Clinic, a young doctor who came up with the concept 'infect obesity' believed that the obesity is caused by a kind of virus, Years of experiment that he conducted on 24..... Later he moved to America and tested on a new virus named 25 ..... which proved to be a significant breakthrough. Although there seems no way to eliminate the virus, a kind of 26 .....can be separated as to block the expressing power of the virus. The doctor future is aiming at developing a new 27 .....to effectively combating the virus.

Section 3

Bright Children

A. BY the time Laszlo Polgar's first baby was born in 1969 he already had film views on child-rearing. An eccentric citizen of communist Hungary, he had written a book called "Bring up Genius r and one of his favourite sayings was "Geniuses are made, not bom[77]. An expert on the theory of chess, he proceeded to teach little Zsuzsa at home, spending lip to tm hours a day on the game. Two more daughters were similarly hot-housed. All three obliged then father by becoming world-class players. The youngest, Judit, is currently ranked 13th in the world, and is by far the best female chess player of all time. Would the experiment have succeeded with a different trio of children? If any child can he turned into a star, then a lot of time and money are being wasted worldwide on trying to pick winners.

B. America has long held "talent searches", using test results and teacher recommendations to select children for advanced school courses, summer schools and other extra tuition. This provision is set to grow. In his state-of-the-union address in 2006, President George Buah announced the "American Competitiveness Initiative", which, among much else, would train 70,000 high-school teachers to lead advanced courses for selected pupils in mathematics and science. Just as the superpowers' space race made Congress put money into science education, the thought of China and India turning out hundreds of thousands of engineers and scientists is scaring America into

prodding its brightest to do their best.

C. The philosophy behind this talent search is that ability is innate; that it can be diagnosed with considerable accuracy, and that it is worth cultivating. In America, bright children are ranked as “moderately”, "highly”, "exceptionally” and “profoundly” gifted. The only chance to influence innate ability is thought to be in the womb or the first couple of years of life. Hence the fed for “teaching aids” such as videos and flashcards for newborns, and “whale sounds* on tape which a pregnant mother can strap to her belly.

D. In Britain, there Í 5 a broadly similar belief in die existence of innate talent, but also an egalitarian sentiment which makes people queasy about the idea of investing resources in grooming intelligence. Teachers are often opposed to separate provision for the best-performing children, saying any extra help should go to stragglers. In 2002, in a bid to help the able while leaving intact die ban on most selection by ability in state schools, the government get up the National Acadony for Gifted and Talented Youth. This outfit runs summer schools and masts- classes for children nominated by then schools. To date, though, only seven in ten secondary schools have nominated even a single child. Last year all schools were told they must supply the names of their top 10%.

E. Picking winners is also the order of the day in ex-communist states, a hangover from the times when talented individuals were plucked from their homes and ruthlessly trained far die glory of the notion. But in many other countries, opposition to the idea of singling out talent and grooming it runs deep. In Scandinavia, a belief in virtues like modesty and social solidarity makes people flinch from die idea of treating brainy children differently.

F. And in Japan there is a widespread belief that all children are born with the some innate abilities —and should therefore be treated alike. All are taught together, covering the same syllabus at the same Tate until they finish compulsory schooling. Those who team quickest are expected then to teach their classmates. In China, extra teaching is provided, but to a self-selected hunch. “Children's palaces'’ in big cities offer a huge range of after-school classes. Anyone can sign up; all that is asked is excellent attendance.

G. Statistics give little clue as to which system is best. The performance of the most able is heavily affected by factors other than state provision. Most state education in Britain is nominally rum-selective, but middle-class parents try to live near die best schools. Ambitious Japanese parents have made private, out-of-school tuition a thriving business. And Scandinavia's egalitarianism might work less well in places with more diverse populations and less competent teachers. For what it's worth, the data suggest that some countries—like Japan and Finland, see table—can eschew selection and still thrive. But that does not mean that any country can ditch selection and do as well.

H. Mr Polgar thought any child could be a prodigy given the right teaching, an early start and enough practice. At one point he planned to prove it by adopting three baby boys from a poor country and toying his methods on them. (His wife vetoed the scheme.) Some say the key to success is simply hard graft. Judit, the youngest of the Polgar sisters, was the most driven, and the most successful; Zsofia, the middle one, was regarded as the most talented, but she was the only one who did not achieve the

status of grand master. “Everything came easiest to her,” said her older sister. “But she was lazy.”

Questions 28-33

Do the following statements agree with the information given in Reading Passage 3? In boxes 28-33 on your answer sheet, write

YES	*if the statement is true*
NO	*if the statement is false*
NOT GIVEN	*if the information is not given in the passage*

28 America has a long history of selecting talented students into different categories.

29 Teachers and schools in Britain held welcome attitude towards government's selection of gifted students.

30 Some parents agree to move near reputable schools in Britain.

31 Middle-class parents participate in theft children’s education.

32 Japan and Finland comply with selected student’s policy.

33 Avoiding-selection-policy only works in a specific environment.

Questions 34-35

Choose the correct letter, A, B, c or D.

Write your answers in boxes 34-35 on your answer sheet.

34 What's Laszlo Polgar's point of view towards geniuses of children?

A Chess is the best way to train geniuses

B Genius tend to happen on first child

C Geniuses can be educated later on

D Geniuses are born naturally

35 What is the purpose of citing Zsofia's example in the last paragraph?

A Practice makes genius

B Girls are not good at *chessing*

C She was an adopted child

D Middle child is always the most talented

Questions 36-40

Use the information in the passage to match the countries (listed A-E) with correct connection below. Write the appropriate letters A-E in boxes 36-40 on your answer sheet.

A Scandinavia

B Japan

C Britain

D China

E America

---

36 Less gifted children get help from other classmates

37 Attending extra teaching is open to anyone

38 People are reluctant to favor gifted children due to social characteristics

39 Both view of innate and egalitarian co-existed

40 Craze of audio and video teaching for pregnant women.

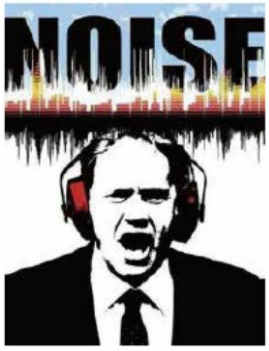
Reading Test 33

Section 1

You should spend about 20 minutes on Questions which are based on Reading Passage 1 on the following pages.

Section A: A decibel Hell:

It's not difficult for a person to encounter sound at levels that can cause adverse health effects. During a single day, people living in a typical urban environment can experience a wide range of sounds in many locations, even once-quiet locales have become polluted with noise. In fact, it's difficult today to escape sound completely. In its 1999 Guidelines for predicting Community Noise, the World Health Organization (WHO) declared "Worldwide, noise-induced hearing impairment is the most prevalent irreversible occupational hazard, and it is estimated that 120 million people worldwide have disabling hearing difficulties." Growing evidence also points to many other health effects of too much volume.



Mark Stephenson, a Cincinnati, Ohio-based senior research audiologist at the National Institute for Occupational Safety and Health (NIOSH), says his agency's definition of hazardous noise is sound that exceeds the time-weighted average of 85 dBA, meaning the average noise exposure measured over a typical eight-hour work day. Other measures and definitions are used for other purposes.

Section B: Growing Volume

In the United States, about 30 million workers are exposed to hazardous sound levels on the job, according to NIOSH. Industries having a high number of workers exposed to bud sounds include construction, agriculture, mining, manufacturing, utilities, transportation, and the military.

Noise in U.S industry is an extremely difficult problem to monitor, acknowledges Craig Moulton, a senior industrial hygienist for the Occupational Safety and Health Administration (OSHA). "Still," he says, "OSHA does require that any employer with workers overexposed to noise provide protection for those employees against the harmful effects of noise. Additionally, employers must implement a continuing, effective hearing conservation program as outlined in OSHA's Noise Standard"

Section C: Scary Sound Effects

Numerous scientific studies over the years have confirmed that exposure to certain levels of sound can damage hearing. Prolonged exposure can actually change the structure of the hair cells in the inner ear, resulting in hearing toss. It can also cause tinnitus, a ringing, roaring, buzzing, or clicking in the ears.

NIOSH studies from the mid to late 1990s show that 90% of coal miners have hearing impairment by age 52—compared to 9% of the general population—and 70% of male metal/nonmetal miners will experience hearing impairment by age 60 (Stephenson notes that from adolescence onward, females tend to have better hearing than males). Neitzel says nearly half of all construction workers have some degree of hearing toss. "NIOSH research also reveals that by age twenty-five, the average carpenter's hearing is equivalent to an otherwise healthy fifty-year-old male who hasn't been exposed to noise," he says.

William Luxford, medical director of the House Ear Clinic of St Vincent Medical Center in Los Angeles, points out one piece of good news: "It's true that continuous noise exposure will lead to the continuation of hearing toss, but as soon as the exposure is stopped, the hearing toss stops. So a change in environment can improve a person's hearing health."

Research is catching up with this anecdotal evidence. In the July 2001 issue of Pediatrics, researchers from the Centers for Disease Control and Prevention reported that, based on audiometric testing of 5,249 children as part of the Third National Health and Nutrition, Examination Survey, an estimated 12.5% of American children have noise-induced hearing threshold shifts — or dulled hearing — in one or both ears. Most children with noise-induced hearing threshold shifts have only limited hearing damage, but continued exposure to excessive noise can lead to difficulties with high-frequency sound discrimination. The report listed stereos, music concerts, toys (such as toy telephones and certain rattles), lawn mowers, and fireworks as producing potentially harmful sounds.

Section D: Beyond the Ears

The effects of sound don't stop with the ears. Nonauditory effects of noise exposure are those effects that don't cause hearing toss but still can be measured, such as elevated blood pressure, toss of sleep, increased heart rate, cardiovascular constriction, labored breathing, and changes in brain chemistry.

The nonauditory effects of noise were noted as early as 1930 in a study published by E.L. Smith and D.L. Laird in volume 2 of the Journal of the Acoustical Society of America. The results showed that exposure to noise caused stomach contractions in healthy human beings. Reports on noise's nonauditory effects published since that pioneering study have been both contradictory and controversial in some areas.

Bronzaft and the school principal persuaded the school board to have acoustical tile installed in the classrooms adjacent to the tracks. The Transit Authority also treated the tracks near the school to make them less noisy. A follow-up study published in the September 1981 issue of the Journal of Environmental Psychology found that children's reading scores improved after these interventions were put in place.

Section E: Fighting for Quiet

Anti-noise activists say that Europe and several countries in Asia are more advanced than the United States in terms of combating noise. "Population pressure has prompted Europe to move more quickly

on the noise issue than the United States has," Hume says. In the European Union, countries with cities of at least 250,000 people are creating noise maps of those cities to help leaders determine noise pollution policies. Paris has already prepared its first noise maps. The map data, which must be finished by 2007, will be fed into computer models that will help test the sound impact of street designs or new buildings before construction begins.

Activists in other countries say they too want the United States to play a more leading role on the noise issue. But as in other areas of environmental health, merely having a more powerful government agency in place that can set more regulations is not the ultimate answer, according to other experts. Bronzaft stresses that governments worldwide need to increase funding for noise research and do a better job coordinating their noise pollution efforts so they can establish health and environmental policies based on solid scientific research. "Governments have a responsibility to protect their citizens by curbing noise pollution," she says.

Questions 1-5

Complete the summary below.

Choose NO MORE THAN TWO WORDS from the passage for each answer. Write your answers in boxes 1-5 on your answer sheet.

Nowadays it seems difficult for people to avoid the effects of living in a noisy world. Noise is the sound beyond average of 1..... referring to the agency's definition. Scientific studies over the years from the mid to late 1990s have confirmed that exposure to certain levels of sound can cause damage 2.....on certain senior age.

From the testing of 5,249 children, those who are constantly exposed to excessive noise may have trouble in 3..... sound discrimination. The effects of sound don't stop with the ears, exposure to noise may lead to unease of 4.....in healthy people. Europe has taken steps on the noise issue, big cities of over 250,000 people are creating 5.....to help creating noise pollution policies.

Questions 6-10

Look at the following researchers and the list of findings below. Match each researcher with the correct finding.

Write the correct letter in boxes 6-10 on your answer sheet.

List of people or orgnisations

A WHO

B William Luxford (the House Ear Clinic),

C Carig Moulton (OSHA)

D Arline Bronzaft

E Centers for Disease Control and Prevention

---

6 People can change the environment to improve hearing health.

7 Government should continue the research on anti-noise researches with fund

8 companies should be required to protect the employees to avoid noise

9 Noise has posed effect on American children children's hearing ability

10 noise has seriously affected human being where they live worldwide

Questions 11-13

11 The board of schools built close to the tracks are convinced to

A moved the classrooms away from the noisy track

B regulated the track usage to a less extent

C utilised a special material into classroom buildings lessening the effect of outside noise

D oganised a team for a follow-up study

12 In the European countries, the big cities' research on noise focuses on

A How to record pollution details of the city on maps

B the impact of noise on population shift in the European cities

C how wide can a city be to avoid noise pollution

D helping the authorities better make a decision on management of the city

13 What is the best title of paragraph 1?

A How people cope with noise pollutions

B the fight against the noise with the powerful technology

C The Effects of Living in a Noisy World

D The Effects of noise on children's learning

Section 2

Is Graffiti Art or Crime?

A. The term graffiti derives from the Italian *graffio* meaning 'scratching' and can be defined as uninvited markings or writing scratched or applied to objects, built structures and natural features. It is not a new phenomenon: examples can be found on ancient structures around the world, in some cases predating the Greeks and Romans. In such circumstances it has acquired invaluable historical and archaeological significance, providing a social history of life and events at that time. Graffiti is now a problem that has become pervasive, as a result of the availability of cheap and quick means of mark-making.

B. It is usually considered a priority to remove graffiti as quickly as possible after it appears. This is for several reasons. The first is to prevent 'copy-cat' emulation which can occur rapidly once a clean surface is defaced. It may also be of a racist or otherwise offensive nature and many companies and councils have a policy of removing this type of graffiti within an hour or two of it being reported. Also, as paints, glues and inks dry out over time they can become increasingly difficult to remove and are usually best dealt with as soon as possible after the incident. Graffiti can also lead to more serious forms of vandalism and, ultimately, the deterioration of an area, contributing to social decline.

C. Although graffiti may be regarded as an eyesore, any proposal to remove it from sensitive historic surfaces should be carefully considered: techniques designed for more robust or utilitarian surfaces may result in considerable damage. In the event of graffiti incidents, it is important that the owners of buildings or other structures and their consultants are aware of the approach they should take in dealing with the problem. The police should be informed as there may be other related attacks occurring locally. An incidence pattern can identify possible culprits, as can stylised signatures or nicknames, known as 'tags, which may already be familiar to local police. Photographs are useful to record graffiti incidents and may assist the police in bringing a prosecution. Such images are also required for insurance claims, and can be helpful to cleaning operatives, allowing them to see the problem area before arriving on site.

D. There are a variety of methods that are used to remove graffiti. Broadly these divide between chemical and mechanical systems. Chemical preparations are based on dissolving the media; these solvents can range from water to potentially hazardous chemical 'cocktails'. Mechanical systems such as wire-brushing and grit-blasting attempt to abrade or chip the media from the surface. Care should be taken to comply with health and safety legislation with regard to the protection of both passers-by and any person carrying out the cleaning, operatives should follow product guidelines in terms of application and removal, and wear the appropriate protective equipment. Measures must be taken to ensure that run-off, aerial mists, drips and splashes do not threaten unprotected members of the public. When examining a graffiti incident it is important to assess the ability of the substrate to withstand the prescribed treatment. If there is any doubt regarding this, then small trial areas should be undertaken to assess the impact of more extensive treatment.

E. A variety of preventive strategies can be adopted to combat a recurring problem of graffiti at a given site. As no two sites are the same, no one set of protection measures will be suitable for all situations. Each site must be looked at individually. Surveillance systems such as closed circuit television may also help. In cities and towns around the country, prominently placed cameras have been shown to reduce anti-social behaviour of all types including graffiti. Security patrols will also act as a deterrent to prevent recurring attacks. However, the cost of this may be too high for most situations. Physical barriers such as a wall, railings, doors or gates can be introduced to

discourage unauthorised access to a vulnerable site. However, consideration has to be given to the impact measures have on the structure being protected. In the worst cases, they can be almost as damaging to the quality of the envfronment as the graffiti they prevent. In others, they might simply provide a new surface for graffiti.

F. One of the most significant problems associated with graffiti removal is the need to remove it from surfaces that are repeatedly attacked. Under these circumstances the repeated removal of graffiti using even the most gentle methods will ultimately cause damage to the surface material. There may be situations where the preventive strategies mentioned above do not work or are not a viable proposition at a given site. Anti-graffiti coatings are usually applied by brush or spray leaving a thin veneer that essentially serves to isolate the graffiti from the surface.

G. Removal of graffiti from a surface that has been treated in this way is much easier, usually using low-pressure water which reduces the possibility of damage. Depending on the type of barrier selected it may be necessary to reapply the coating after each graffiti removal exercise.

Questions 14-19

Reading Passage 2 has six paragraphs, A-G.

Which paragraph contains the following information?

Write the correct letter, A-G ,in boxes 14-19 on your answer sheet. NB You may use any letter more than once.

14 why chemically cleaning graffiti may cause damage

15 the benefit of a precautionary strategy on the gentle removal

16 the damaging and accumulative impact of graffiti to the community

17 the need for different preventive measures being taken to cope with graffiti

18 a legal proposal made to the owner of building against graffiti

19 the reasons of removing graffiti as soon as possible

Question 20-21

Choose TWO letters, A-E.

Write your answers in boxes 20-21 on your answer sheet.

Which two statements are true concerning the removal of graffiti

A cocktail removal can be safer than water treatment

B small patch trial before applying large scale of removing

c Chemical treatments are the most expensive way of removing

D there are risks for both Chemical and medication method

E mechanical removals are much more applicable than Chemical treatments

Questions22-23

Choose TWO letters, A-E.

Write your answers in boxes 22-23 on your answer sheet.

Which TWO of the following preventive measures against graffiti are mentioned effective in the passage?

A organise more anti graffiti movement in the city communities

B increase the police patrols on the street

c Build a new building with material repelling to water

D installing more visible security cameras

E Provide a whole new surface with chemical coat

Questions 24-27

Complete the Summary of the paragraphs of Reading Passage 2.

Use NO MORE THAN TWO WORDS from the passage for each answer. Write your answers in boxes 24-27 on your answer sheet.

24 Ancient graffiti is of significance and records the 24..... of details life for that period.

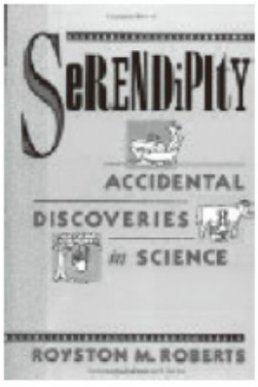
25 The police can recognize newly committed incidents of graffiti by the signature which is called 25.....that they are familiar with

26 Operatives ought to comply with relevant rules during the operation, and put on the suitable 26.....

27 Removal of graffiti from a new type of coating surface can be much convenient of using 27.....

Section 3

Serendipity: The Accidental Scientists

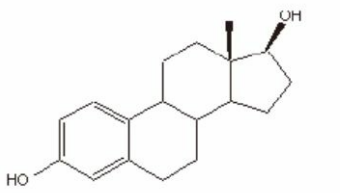


A. A paradox lies close to the heart of scientific discovery. If you know just what you are looking for, finding it can hardly count as a discovery, since it was fully anticipated. But if, on the other hand, you have no notion of what you are looking for, you cannot know when you have found it, and discovery, as such, is out of the question. In the philosophy of science, these extremes map onto the purist forms of deductivism and inductivism: In the former, the outcome is supposed to be logically contained in the premises you start with; in the latter, you are recommended to start with no expectations whatsoever and see what turns up.

B. As in so many things, the ideal position is widely supposed to reside somewhere in between these two impossible-to-realize extremes. You want to have a good enough idea of what you are looking for to be surprised when you find something else of value, and you want to be ignorant enough of your

end point that you can entertain alternative outcomes. Scientific discovery should, therefore, have an accidental aspect, but not too much of one. Serendipity is a word that expresses a position something like that. It's a fascinating word, and the late Robert King Merton—'the father of the sociology of science'—liked it well enough to compose its biography, assisted by the French cultural historian Elinor Barber.

C. Serendipity means a 'happy accident' or 'pleasant surprise'; specifically, the accident of finding something good or useful without looking for it. The first noted use of 'serendipity' in the English language was by Horace Walpole (1717-1792). In a letter to Horace Mann (dated 28 January 1754) he said he formed it from the Persian fairy tale *The Three Princes of Serendip,* whose heroes 'were always making discoveries, by accidents and sagacity, of things they were not in quest of'. The name stems from *Serendip,* an old name for Sri Lanka.



Estradiol

D. Besides antiquarians, the other community that came to dwell on serendipity to say something important about their practice was that of scientists. Many scientists, including the Harvard physiologist Walter Cannon and, later, the British immunologist Peter Medawar, liked to emphasize how much of scientific discovery was unplanned and even accidental. One of Cannon's favorite examples of such serendipity is Luigi Galvani's observation of the twitching of dissected frogs' legs, hanging from a copper wire, when they accidentally touched an iron railing, leading to the discovery of 'galvanism'; another is Hans Christian Orsted's discovery of electromagnetism when he unintentionally brought a current-carrying wire parallel to a magnetic needle. The context in which scientific serendipity was most contested and had its greatest resonance was that connected with the idea of planned science. The serendipitists were not all inhabitants of academic ivory towers. Two of the great early-20th-century American pioneers of industrial research—Willis Whitney and Irving Langmuir, both of General Electric—made much play of serendipity, in the course of arguing against overly rigid research planning.

E. Yet what Cannon and Medawar took as a benign method, other scientists found incendiary. To say that science had a significant serendipitous aspect was taken by some as dangerous denigration. If scientific discovery were really accidental, then what was the special basis of expert authority?

F. In this connection, the aphorism of choice came from no less an authority on scientific discovery than Louis Pasteur: "Chance favors the prepared mind." Accidents may happen, and things may turn

up unplanned and unforeseen, as one is looking for something else, but the ability to notice such events, to see their potential bearing and meaning, to exploit then occurrence and make constructive use of them these are the results of systematic mental preparation. What seems like an accident is just another form of expertise. On closer inspection, it is insisted, accident dissolves into sagacity.

G. In 1936, as a very young man, Merton wrote a seminal essay on "The Unanticipated Consequences of Purposive Social Action." It is, he argued, the nature of social action that what one intends is rarely what one gets: Intending to provide resources for buttressing Christian religion, the natural philosophers of the Scientific Revolution laid the groundwork for secularism; people wanting to be alone with nature in Yosemite Valley wind up crowding one another. We just don't know enough—and we can never know enough—to ensure that the past is an adequate guide to the future: Uncertainty about outcomes, even of our best-laid plans, is endemic. All social action, including that undertaken with the best evidence and formulated according to the most rational criteria, is uncertain in its consequences.

Questions 28-33

Reading passage 3 has seven paragraphs, A-G

Choose the correct heading for paragraphs A -F from the list of headings below. Write the correct number, i-x, in boxes 28-33 on your answer sheet.

List of headings

i The origin of serendipity

ii Horace Walpole’s fairy tale

iii Arguments against serendipity

iv Two basic knowledge in the paradox of scientific discovery V The accidental evidences in and beyond science

vi organization’s movement Opposing against the authority

vii Accident and mental preparation

viii Planned research and anticipated outcome

ix The optimum balance between the two extremes

---

28 Paragraph A

29 Paragraph B

30 Paragraph c

31 Paragraph D

32 Paragraph E

33 Paragraph F

Questions 34-36

Complete the summary below, using NO MORE THAN TWO WORDS from the Reading Passage for each answer.

Write your answers in boxes 34-36 on your answer sheet.

The word 'serendipity' was coined in the writing of 34.....to Horace Mann. He derived it from a 35....., the characters of which were always making fortunate discoveries by accident. The stem *Serendip* was a former name for 36.....

Questions 37-40

Choose the correct letter. A, B, ***c*** *or D.*

Write the correct letter in boxes 37-40 on your answer sheet.

37 What does '*inductivism*' mean in paragraph A?

A. observation without anticipation at the beginning

B. Looking for what you want in the premise

C. The expected discovery

D. The map we pursued

38 Scientific discovery should

A be much of accidental aspect

B be full of value

C. be between the two exhemes

D be skeptical

39 The writer mentions Luigi Galvani's observation to illustrate

A the cruelty of frog's dissection

B the happy accident in scientific discovery

c the practice of scientists

D the rigid research planning

40 Why does the writer mention the example in Yosemite Valley *in paragraph G?*

A To illustrate the importance of a systematic plan

B To illustrate there is an unpredictable reality towards expectation

C To illustrate the original anticipation

D To illustrate that intention of social action is totally meaningless

Reading Test 34

Section 1

LONGAEVA: Ancient Bristlecone Pine

A. To understand more about the earth's history, humans have often looked to the natural environment for insight into the past. The bristlecone pine (Pinus longaeva), of the White Mountains in California, has served this purpose greater than any other species of free on the planet. Conditions here are brutal: scant precipitation and low average temperatures mean a short growing season, only intensified by ferocious wind and mal-nutritious rocky. Nevertheless, bristlecone pines have claimed these barren slopes as their permanent home. Evolving here in this harsh environment, super-adapted and without much competition, bristlecones have earned their seat on the longevity throne by becoming the oldest living trees on the planet. Results of extensive studies on bristlecone pine stands have shown that in fact such, environmental limitations are positively associated with the attainment of great age. This intriguing phenomenon will be discussed further on.

B. But exactly how old is old? Sprouted before the invention of Egyptian hieroglyphs and long before the teachings of Jesus of Nazareth, Dethuselah is the oldest bristlecone alive at roughly 4,700 years. Although specimens of this age do not represent the species' average, there are 200 trees more than 3,000 years old, and two dozen more than 4,000. Considering that these high ages are obtained in the face of such remarkable envnonmental adversity, the bristlecone pines have become the focus of much scientific examination over the past half century.

C. Perhaps most interested in the bristlecone pine are dendochronologists, or tree-ring daters. With every strenuous year that passes in the White Mountains, each bristlecone grows and forms a new outer layer of cambium that reflects a season's particular ease or hardship. So while, growing seasons may expand or shrink, the trees carry on, their growth rings faithfully recording the bad years alongside the goods. Through examining the annual growth rings of both living and dead specimens, taking thousands of core samples, and by processes of cross-dating between trees and other qualitative records, scientists have compiled a continuous tree-ling record that dates back to the last Ice Age between eight and ten thousand years ago. Among other linked accomplishments, this record has enhanced the dating process, helping to double-cheek and correct the radiocarbon-14 method to more accurately estimate the age of organic material.

D. Now more than ever the importance of monitoring the bristiecone is being realized. As our global climate continues to undergo its most recent and abrupt atmospheric change, these ancient scribes continue to respond. Since, the rings of wood formed each year reveal the trees' response to climatic conditions during a particular growing seasons, in their persistence they have left US natural recordings of the past, markers of the present, and clues to the future.

E. The species' name originates from the appearance of its unusual cones and needles. The bristlecone's short, pale needles are also trademarks, bunching together to form foxtail-like bundles. As is the case of moat conifer needles, these specialized leaves cluster together to shelter the stomata so very little moisture is lost through them. This adaptation helps the bristlecone photosynthesize during particularly brutal months, Saving the energy of constant needle replacement and providing a stable supply of chlorophyll. For a plant trying to store so much energy, bristlecone seeds are relatively large in size. They are first reproduced when trees reach ages between thirty and seventy-five years old Germination rates are generally high, in part because seeds require little to no initial stratification. Perhaps the most intriguing physical characteristic of a mature bristlecone, however, is its ratio of living to dead wood on harsh sites and how this relates to old age. In older trees, however, especially in individuals over 1,500 years, a strip-bark trait is adaptive. This condition occurs as a result of cambium dieback, which erodes and thereby exposes certain areas of the bole, leaving only narrow bands of bark intact

F. The technique of cambial edge retreat has help promote old age in bristlecone pine, but that certainly is not the only reason. Most crucial to these trees' longevity is their compact size and slow rates of growth. By remaining in most cases under ten meters tall, bristlecones stay close to the limited water supply and can hence support more branches and photosynthesizing. Combined with the dry, windy, and often freezing mountain a ũ r , slow growth guarantees the hrifltlecones tight, fibrous rings with a high resin content and structural strength. The absence of natural disaster has also safeguarded the bristlecone's lengthy lifespan. Due to a lack of ground cover vegetation and an evenly spaced layout, bristlecone stands on the White Mountain peaks have been practically unaffected by fire. This lack of vegetation also means a lack of competition for the bristlecones.

G. Bristlecone pine's restricted to numerous, rather isolated stands at higher altitudes in the southwestern United States. Stands occur from the Rocky Mountains, through the Colorado Plateau, to the western margin of the Great Basin. Within this natural range, the oldest and most widely researched stands of bristlecones occur in California's White Mountains. Even just 200 miles away from the Pacific Ocean, the White Mountains are home to one of this country's few high-elevation deserts. Located in the extreme eastern rain shadow of the Sierra Nevada, this region receives only 12.54 inches of precipitation per year and experiences temperatures between -20F and +50F. The peaks south of the Owens Valley, are higher up than they might appear from a distance. Although most summits exist somewhere around 11,000 feet, snow-capped White Mountain Peak, for which the range is named, stands at 14,246 feet above sea level. That said, to reach areas of pure bristlecone is an intense journey all to itself.

H. With seemingly endless areas of wonder and interest, the bristlecone pines have become subject to much research over the past half-century. Since the annual growth of these ancient organisms directly reflects the climatic conditions of a particular time period, bristlecones are of greatest significance to dendochronologists, or tree-ring specialists. Dating any tree is simple and can be done within reasonable accuracy just by counting out the rings made each year by the plant's natural means of growth. By carefully compiling a nearly 10,000-year-old bristlecone pine record, these patient scientists have accurately corrected the carbon-14 dating method and estimated ages of past

periods of global climate change. What makes this record so special to dendochronologists, too, is that, nowhere, throughout time, is precisely the same long-term sequence of wide and narrow rings repeated, because year-to-year variations in climate are never exactly the same.

I. Historically the bristlecone's remote location and gnarled wood have deterred commercial extraction, but nothing on earth will go unaffected by global warming. If temperatures rise by only 6 degrees F, which many experts say is likely this century, about two-thirds of the bristlecones' ideal habitat in the White Mountains effectively will be gone. Almost 30,000 acres of National Forest now preserves the ancient bristlecone, but paved roads, campsites, and self-guided trails have led only to more human impact. In 1966, the U.S.F.S reported over 20,000 visitors to the Ancient Bristlecone Pine Forest, a figure which could exceed 40,000 today. Over the past hundreds of thousands of years, this species has endured in one of earth's most trying environments; they deserve our respect and reverence. As global climate change slowly alters their environment, we as humans must do our part to raise awareness and lower our impact.

Questions 1-4

The reading Passage has nine paragraphs A-I.

Which paragraph contains the following information?

Write the correct letter A-I, in boxes 1-4 on your answer sheet.

1 Human activity threats bristlecone pines habitat

2 Explanations for ring of bristlecone pines

3 An accountable recording provided from the past till now

4 Survived in hostile environment

Questions 5 - 7

*Choose the correct letter, A, B, **c** or D.*

Write your answers in boxes 5-7 on your answer sheet.

5 According to passage A, what aspect of bristlecone pines attracts author's attention?

A Brutal environment they live

B Remarkable long age

C They only live in California

D Outstanding height

6 Why do we investigate Bristlecone pines in higher altitudes of California's White Mountains?

A Because oldest ones researched in this region

B Because most bizarre ones are in this region

C Because precipitation is rich in this region

D Because sea level is comparatively high in this region

7 Why there are repeated patterns of wide and narrow rings?

A Because sea level rises which affects tree ring

B Because tree ring pattern is completely random

c Because ancient organisms affect its growth

D Because variation of climate change is different

Questions 8-13

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 11-13 on your answer sheet.

The bristlecone's special adaptation is benefit for photosynthesizing, and reserving the_8_of leave replacement and providing sufficient chlorophyll. Probably because seeds do not rely on primary _____9_____, Germination rate is high. Because of cambium dieback, only narrow ____10_____ remain complete. Due to multiple factors such as windy, cold climate and____11_____, bristlecones' rings have tight and solid structure full of resin. Moreover, bristlecone stands are safe from fire because of little ____12_____plants spread in this place. The summits of Owens Valley is higher than they emerge if you observe from a ___13_____.

Section 2

You should spend about 20 minutes on Questions 14-27, which are based on Reading Passage 2 on the following pages.

Monkeys and Forests

AS AN EAST WIND blasts through a gap in the Cordillera de Ti ỉ arán, a rugged mountain range that splits northern Costa Rica in half, a female mantled howler monkey moves through the swaying trees of the forest canopy.

A. Ken Glander, a primatologist from Duke University, gazes into the canopy, tracking the female's movements. Holding a dart gun, he waits with infinite patience for the right moment to shoot. With great care, Glander aims and fires. Hit in the rump, the monkey wobbles. This howler belongs to a population that has lived for decades at Hacienda La Pacifica, a working cattle ranch in Guanacaste province. Other native primates — white-faced capuchin monkeys and spider monkeys — once were common in this area, too, but vanished after the Pan-American Highway was built nearby in the 1950s. Most of the smrounding land was clear-cut for pasture.

B. Howlers persist at La Pacifica, Glander explains, because they are leaf-eaters. They eat fruit, when it’s available but, unlike capuchin and spider monkeys, do not depend on large areas of fruiting trees. “Howlers can survive anyplace you have half a dozen trees, because theft

eating habits are so flexible," he says. In forests, life is an arms race between trees and the myriad creatures that feed on leaves. Plants have evolved a variety of chemical defenses, ranging from bad-tasting tannins, which bind with plant-produced nutrients, rendering them indigestible, to deadly poisons, such as alkaloids and cyanide.

C. All primates, including humans, have some ability to handle plant toxins. "We can detoxify a dangerous poison known as caffeine, which is deadly to a lot of animals" Glander says. For leaf-eaters, long term exposure to a specific plant toxin can increase their ability to defuse the poison and absorb the leaf nutrients. The leaves that grow in regenerating forests, like those at La Pacifica, are actually more howler friendly than those produced by the undisturbed, centuries-old trees that survive farther south, in the Amazon Basin. In younger forests, frees put most of their limited energy into growing wood, leaves and fruit, so they produce much lower levels of toxin than do well-established, old-growth trees.

D. The value of maturing forests to primates is a subject of study at Santa Rosa National Park, about 35 miles northwest of Hacienda La Pacifica. The park hosts populations not only of mantled howlers but also of white-faced capuchins and spider monkeys. Yet the forests there are young, most of them less than 50 years old. Capuchins were the first to begin using the reborn forests, when the trees were as young as 14 years. Howlers, larger and heavier than capuchins, need somewhat older trees, with limbs that can support their greater body weight. A working ranch at Hacienda La Pacifica also explain their population boom in Santa Rosa. "Howlers are more resilient than capuchins and spider monkeys for several reasons," Fedigan explains. "They can live within a small home range, as long as the trees have the right food for them, spider monkeys, on the other hand, occupy a huge home range, so they can't make it in fragmented habitat."

E. Howlers also reproduce faster than do other monkey species in the area. Capuchins don't bear their first young until about 7 years old, and spider monkeys do so even later, but howlers give birth for the first time at about 3.5 years of age. Also, while a female spider monkey will have a baby about once every four years, well-fed howlers can produce an infant every two years.

F. The leaves howlers eat hold plenty of water, so the monkeys can survive away from open streams and water holes. This ability gives them a real advantage over capuchin and spider monkeys, which have suffered during the long, ongoing drought in Guanacaste.

G. Growing human population pressures in Central and South America have led to persistent destruction of forests. During the 1990s, about 1.1 million acres of Central American forest were felled yearly. Alejandro Estrada, an ecologist at Estacion de Biologia Los Tuxtlas in Veracruz, Mexico, has been exploring how monkeys survive in a landscape increasingly shaped by humans. He

and his colleagues recently studied the ecology of a group of mantled howler monkeys that thrive in a habitat completely altered by humans: a cacao plantation in Tabasco, Mexico. Like many varieties of coffee, cacao plants need shade to grow, so 40 years ago the landowners planted fig, monkey pod and other tall trees to form a protective canopy over their crop. The howlers moved in about 25 years ago after nearby forests were cut. This strange habitat, a hodgepodge of cultivated native and exotic plants, seems to support about as many monkeys as would a same-sized patch of wiki forest. The howlers eat the leaves and fruit of the shade trees, leaving the valuable cacao pods alone, so the farmers tolerate them.

H Estrada believes the monkeys bring underappreciated benefits to such farms, dispersing the seeds of fig and other shade frees and fertilizing the soil with feces. He points out that howler monkeys live in shade coffee and cacao plantations in Nicaragua and Costa Rica as well as in Mexico. Spider monkeys also forage in such plantations, though they need nearby areas of forest to survive in the long term. He hopes that farmers will begin to see the advantages of associating with wild monkeys, which includes potential ecotourism projects.

"Conservation is usually viewed as a conflict between agricultural practices and the need to preserve nature, Estrada says. "We're moving away from that vision and beginning to consider ways in which agricultural activities may become a tool for the conservation of primates in human-modified landscapes."

Questions 14-19

The reading Passage has seven paragraphs A-I.

Which paragraph contains the following information? Write the correct letter *A-I,* in boxes *14-19* on your answer sheet.

14 a reference of reduction in Forest inhabitant

15 Only one species of monkey survived while other two species were vanished

16 a reason for howler Monkey of choosing new leaves

17 mention to howler Monkey's nutrient and eating habits

18 a reference of asking farmers' changing attitude toward wildlife

19 the advantage for howler Monkey's flexibility living in a segmented habitat

Questions 20-22

Look at the following places and the list of descriptions below. Match each description with the correct place, A-E.

List of places

A Hacienda La Pacifica

B Santa Rosa National Park

C a cacao plantation in Tabasco, Mexico

D Estacion de Biotogia Los Tuxtlas in Veracruz, Mexico

E Amazon Basin

Write the correct letter, A-E, in boxes 20-22 on your answer sheet.

20 howler Monkey's benefit to the focal region's agriculture

21 Original home for all three native monkeys

22 A place where Capuchins monkey comes for a better habitat

Question 23-27

Complete the sentences below

Choose NO MORE THAN TWO WORDS from the passage or each answer. Write your answer in boxes 23-27 on your answer sheet.

The reasons for Howlers monkey survive better

in local region than other two species

- Howlers in La Pacifica since they can feed themselves with leaf when 23.....is not easily found

- Howlers has better ability to alleviate the 24....., which old and young trees used to protect themselves

- when compared to that of spider monkeys and capuchin monkeys, the I 25..... rate of Howlers is relatively faster (round for just every 2 years).

- the monkeys can survive away from open streams and water holes as the in Guanacaste leaves howlers eat hold high content of 26..... which ensure them to resist to continuous 27……. in Guanacaste

Section 3

A. While it nay not be possible to completely age-proof our brains, a bravenew world of anti-aging research shows that our gray matter may be far more flexible than we thought. So no one, no matter how old, has to lose their mind. The brain has often been called the three-pound, universe. It's our most powerful and mysterious organ, the seat of the self, laced with as many billions of neurons as the galaxy has stars. NO wonder the mere notion of an aging, falling brain—and the

prospect of memory loss, confusion, and the unraveling of our personality—is so terrifying. As Mark Williams, M.D., author of The American Geriatrics Society's Complete Guide to Aging and Health, says, 'The fear of dementia Is stronger than the fear of death Itself. 'Yet the degeneration of the brain is far from Inevitable. 'Its design features are such that it should continue to function for a lifetime, says Zaven Khachaturian, Ph.D., director of the Alzheimer's Association's Ronald and Nancy Reagan Research Institute. 'There's no reason to expect It to deteriorate with age, even though many of US are living longer lives in fact, scientists' view of the brain's potential Is rapidly changing, according to Stanford University neuroscientist Robert Sapol3ky, Ph.D. Thirty-five years ago we thought Alzheimer's disease was a dramatic version of normal aging. Now we realize it's a disease with a distinct pathology. In fact, some people simply don't experience any mental decline, so we've begun to study them.[1] Antonio Damasio, M.D., Ph.D., head of the Department of Neurology at the University of Iowa and author of Descartes' Error, concurs. 'Older people can continue to have extremely rich and healthy mental lives.

B. The seniors were tested in 1988 and again in 1991. Four factors were found to be related to their mental fitness: levels of education and physical activity, lung function, and feelings of self-efficacy. 'Each of these elements alters the way our brain functions," says Marilyn Albert, Ph.D., of Harvard Medical School, and colleagues from Yale, Duke, and Brandeis Universities and the Mt. Sinai School of Medicine, who hypothesizes that regular exercise may actually stimulate blood flow to the brain and nerve growth, both of which create more densely branched neurons, rendering the neurons stronger and better able to resist disease. Moderate aerobic exercise, including long brisk walks and frequently climbing stairs, will accomplish this.

C. Education also seems to enhance brain function. People who have challenged themselves with at least a college education may actually stimulate the neurons in their brains. Moreover, native intelligence may protect our brains. It's possible that smart people begin life with a greater number of neurons, and therefore have a greater reserve to fall back on if some begin to fail. "If you have a lot of neurons and keep them busy, you may be able to tolerate more damage to your brain before it shows," says Peter Davies, M.D., of the Albert Einstein College of Medicine in the Bronx, New York. Early linguistic ability also seems to help our brains later in life. A recent study in the New England Journal of Medicine looked at 93 elderly nuns and examined the autobiographies they had written 60 years earlier, just as they were joining a convent. The nuns whose essays were complex and dense with ideas remained sharp into their eighties and nineties.

D. Finally, personality seems to play an important role in protecting our mental prowess. A sense of self-efficacy may protect our brain, buffeting it from the harmful effects of stress. According to Albert, there's evidence that elevated levels of stress hormones may harm brain cells and cause the hippocampus a small seahorse-shaped organ that's a crucial moderator of memory to atrophy. A sense that we can effectively chart our own course in the world may retard the release of stress hormones and protect us as we age. "It's not a matter of whether you experience stress or not, " Albert concludes, "it's your attitude toward it. " Reducing stress by meditating on a regular basis may

buffer the brain as well. It also increases the activity of the brain's pineal gland, the source of the antioxidant hormone melatonin, which regulates sleep and may retard the aging process. Studies at the University of Massachusetts Medical Center and the University of Western Ontario found that people who meditated regularly had higher levels of melatonin than those who took 5-milligram supplements. Another study, conducted jointly by Maharishi International University, Harvard University, and the University of Maryland, found that seniors who meditated for three months experienced dramatic improvements in their psychological well-being, compared to their non-meditative peers.

E. Animal studies confirm that both mental and physical activity boost brain fitness. At the Beckman Institute for Advanced Science and Technology in Urbana, Illinois, psychologist William Greenough, Ph.D, let some rats play with a profusion of toys. These rodents developed about 25 percent more connections between their neurons than did rats that didn't get any mentally stimulating recreation. In addition, rats that exercised on a treadmill developed more capillaries in specific parts of their brains than did their sedentary counterparts. This increased the blood flow to their brains. "Clearly the message is to do as many different flyings as possible," Greenough says.

F. It's not just scientists who are catching anti-aging fever. Walk into any health food store, and you'll find nutritional formulas —with names like Brainstorm and Smart ALEC--that claim to sharpen mental ability. The book Smart Drugs & Nutrients, by Ward Dean, M.D. , and John Morgenthaler, was self-published in 1990 and has sold over 120,000 copies worldwide. It has also spawned an underground network of people tweaking their own brain chemistry with nutrients and drugs the latter sometimes obtained from Europe and Mexico. Sales of ginkgo an extract from the leaves of the 200-million-year-old ginkgo tree, which has been shown in published studies to increase oxygen in the brain and meliorate symptoms of Alzheimer's disease—are up by 22 percent in the last six months alone, according to Paddy Spence, president of SPINS, a San Francisco-based market research firm. Indeed, products that increase and preserve mental performance are a small but emerging segment of the supplements industry, says Linda Gilbert, president of HealthFocus, a company that researches consumer health trends. While neuroscientists like Khachaturian liken the use of these products to the superstition of tossing salt over your shoulder, the public is nevertheless gobbling up nutrients that promise cognitive enhancement.

Questions 28-31

*Choose the **Four** correct letters among **A-G***

Write your answers in boxes 28-31 on your answer sheet.

Which of the FOUR situations or conditions assisting the Brains' function?

A Preventive treatment against Alzheimer's disease

B Doing active aerobic exercise and frequently climbing sta ữ s

C High levels of education

D Early verbal or language competence training

E Having more supplements such as ginkgo tree

F Participate in more physical activity involving in stimulating tasks

G Personality and feelings of self-fulfillment

Questions 32-39

Use the information in the passage to match the people (listed A-G) with opinions or deeds below. Write the appropriate letters A-G in boxes 32-39 on your answer sheet. ***NB you may use any latter more than once***

A. Zaven Khachaturian

B. William Greenough

C. Marilyn Albert

D. Robert Sapolsky

E. Linda Gilbert

F. Peter Davies

G. Paddy Spence

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32 Alzheimer's was probably a kind of disease rather than a normal aging process.

33 Keeping neurons busy, people may be able to endure more harm to your brain

34 Regular exercises boost blood flow to the brain and increase anti-disease disability.

35 Significant increase of Sales of ginkgo has been shown.

36 More links between their neurons are found among stimulated animals.

37 Effectiveness of the use of brains supplements products can be of little scientific proof.

38 Heightened levels of stress may damage brain cells and cause part of brain to deteriorate.

39 Products that upgrade and preserve mental competence are still a newly developing industry.

Questions 40

Choose the correct letters among A-D

Write your answers in box 40 on your answer sheet.

According the passage, what is the most appropriate title for this passage?

A Making our minds last a lifetime

B amazing pills of the ginkgo

C how to stay healthy in your old hood

D more able a brain and neurons

Answer Keys

Reading Test 1

Section 1

1	NOT GIVEN	2	TURE	3	FALSE
4	NOT GIVEN	5	FALSE	6	TRUE
7	TRUE	8	Stonemason	9	Gian Giorgio Trissino
10	Inigo Jones	11	Temple	12	Quattro Libri dell' Architettura
13	Benevolent calm				

Section 2

14	Yes	15	No	16	Yes
17	Not given	18	No	19	Not Given
20	Temperature	21	(molten) rock/ash	22	Food
23	Tidal wave	24	Ice age	25	Rockets
26	D				

Section 3

27	B	28	D	29	A
30	E	31	D	32	C
33	NOT GIVEN	34	NO	35	YES
36	NO	37	YES	38	YES
39	A	40	B		

Reading Test 2

Section 1

1	I	2	Iv	3	Ix
4	viii	5	x	6	iii
7	35	8	The bony carapace	9	Cold water/ temperature
10	Florida, America/ The north American	11	(detecting) magnetic fields		
12	Its meat	13	Jellyfish		

Section 2

14	v	15	viii	16	vi
17	vii	18	iii	19	i
20	ii	21	Equal opportunity	22	internal costs
23	c	24	c	25	A
26	B				

Section 3

27	TRUE	28	FALSE	29	TRUE
30	Not given	31	A	32	C
33	D	34	D	35	B
36	A	37	E	38	Popular pastime
39	TV addicts	40	Orienting response		

Reading Test 3

Section 1

1	F	2	B	3	H
4	C	5	F	6	Yes
7	No	8	Not given	9	Home
10	2.8s	11	Oil/lubrication	12	Sextant
13	Marine chronometer				

Section 2

14	v	15	iii	16	ix
17	vii	18	viii	19	ii
20	Not given	21	True	22	False
23	False	24	A	25	E
26	B	27	D		

Section 3

28	400,000 years ago	29	8000 years ago	30	7000 years ago
31	Wooded interglacials	32	10500 years ago	33	Male’s huge anlers
34	Minerals	35	Habitat destruction	36	B
37	D	38	A	39	C
40	C				

Reading Test 4

Section 1

1	E	2	D	3	C
4	A	5	F	6	D
7	B	8	G	9	No
10	Yes	11	No	12	Yes
13	Not given				

Section 2

14	G	15	C	16	B
17	D	18	B	19	B
20	A	21	C	22	True
23	False	24	Not given	25	True
26	Not given				

Section 3

27	iv	28	iii	29	viii
30	ii	31	ix	32	i
33	Collaborative and interative	34	Tangible	35	Tailorable
36	Group of people	37	C	38	A
39	A	40	D		

Reading Test 5

Section 1

1	A	2	C	3	A
4	A	5	C	6	B
7	True	8	True	9	False
10	True	11	False	12	Not given
13	Not given				

Section 2

14	TRUE	15	Not given	16	FALSE
17	TRUE	18	FALSE	19	(high-pressure) air microphones
20	sound energy/ sound wave	21	cable	22	hydrophones/underwater micorphones
23	shipping container	24	seismic reflection profiling	25	laboratory
26	three-dimensional	27	fishing nets		

Section 3

28	D	29	C	30	B
31	F	32	C	33	A
34	E	35	FALSE	36	TRUE
37	TRUE	38	Not Given	39	B
40	E				

Reading Test 6

Section 1

1	B	2	A	3	B
4	F	5	C	6	E
7	G	8	G	9	A
10	Sea water/Salt	11	swimming speed	12	Coastal otters
13	Small mammals				

Section 2

14	iv	15	v	16	ii
17	x	18	vii	19	i
20	vii	21	A	22	C
23	parental guidance	24	compass	25	predators
26	visible				

Section 3

27	C	28	C	29	B
30	A	31	B	32	C
33	20	34	foam	35	waste water
36	harmful	37	bodegrade	38	droplets
39	Lamination and packing	40	Grape growers		

Reading Test 7

Section 1					
1	Yes	2	Not Given	3	Yes
4	Not Given	5	No	6	No
7	ecological release	8	competitors	9	dragon
10	overlooked	11	(have) vanished	12	swallowed up
13	misdated				
Section 2					
14	presentation	15	(daily) routine	16	cultures
17	E	18	D	19	F
20	D	21	C	22	D
23	A	24	E	25	B
26	C				
Section 3					
27	D	28	C	29	A
30	Yes	32	Yes	32	No
33	Not Given	34	Yes	35	C
36	A	37	F	38	
39	E	40	A		

Reading Test 8

Section 1					
1	(serve) drought	2	large seeds	3	heavy rains
4	small seeds	5	finch evolution	6	medium-sized bills
7	human population	8	rice	9	FALSE
10	Not Given	11	TRUE	12	FALSE
13	TRUE				
Section 2					
14	navigation and communications	15	radiation	16	antennae
17	smoke	18	C	19	D
20	B	21	E	22	A
23	FALSE	24	TRUE	25	TRUE
26	Not Given				
Section 3					
27	iii	28	vii	29	i
30	iv	32	ix	32	viii
33	v	34	ii	35	FALSE
36	TRUE	37	Not Given	38	TRUE
39	TRUE	40	B		

Reading Test 9

Section 1					
1	B	2	A	3	E
4	D	5	B	6	A
7	A	8	C	9	A
10	animal rights	11	workshops	12	picnic (lunch)
13	dominican Sisters	14	incomes		
Section 2					
15	D	16	G	17	F
18	A	19	E	20	B
21	C	22	Not Given	23	FALSE
24	TRUE	25	TRUE	26	FALSE
27	Not Given				
Section 3					
28	iv	29	vii	30	iii
31	ii	32	ix	33	F
34	B	35	D	36	A
37	FALSE	38	Not Given	39	TRUE
40	TRUE				

Reading Test 10

Section 1					
1	C	2	C	3	A
4	B	5	A	6	Yes
7	No	8	No	9	Not Given
10	Yes	11	Not Given	12	Yes
13	A				
Section 2					
14	D	15	F	16	E
17	C	18	A	19	D
20	A	21	C	22	C
23	A	24	C	25	C
26	C				
Section 3					
27	B	28	F	29	A
30	C	31	L	32	D
33	personel development	34	(the first) luxury	35	developed/Set
36	strategic solution	37	6 stages	38	90 hours (for one single stage)
39	three years	40	C		

Reading Test 11

Section 1					
1	Word	2	Syllable	3	Single sound/ phoneme
4	TRUE	5	FALSE	6	Not given
7	TRUE	8	FALSE	9	TRUE
10	Not given	11	C	12	B
13	E	14	A		
Section 2					
15	D	16	E	17	C
18	G	19	F	20	fuel
21	power	22	water streams	23	contaminate
24	harvesting	25	photosynthesis	26	Goverment B5
27	(producing/ production) capacity				
Section 3					
28	wood	29	status and weath	30	expensive commodity
31	calssical	32	furniture and textiles	33	Edwin Lutyens
34	local authorities	35	B	36	A
37	D	38	A	39	C
40	C				

Reading Test 12

Section 1					
1	chip	2	grit	3	milten zinc
4	milling machine	5	sockets	6	loudspeakers
7	valves	8	cheaper	9	components
10	lighter	11	cost	12	A
13	chip				
Section 2					
14	Not Given	15	TRUE	16	TRUE
17	TRUE	18	FALSE	19	Not Given
20	clues	21	relationship	22	message
23	rechedule	24	voice mail	25	cellphone
26	meeting				
Section 3					
27	B	28	B	29	A
30	C	32	Yes	32	No
33	Not Given	34	No	35	Yes
36	D	37	B	38	I
39	E	40	G		

Reading Test 13

Section 1					
1	FALSE	2	Not Given	3	Not Given
4	TRUE	5	FALSE	6	tram
7	1954	8	beach volleyball	9	environment
10	wealth people	11	Manly	12	Bondi
13	titled roofs				
Section 2					
14	B	15	E	16	A
17	D	18	B	19	TRUE
20	TRUE	21	Not Given	22	FALSE
23	Not Given	24	headspace	25	filters
26	needle				
Section 3					
27	D	28	H	29	A
30	G	32	E	32	F
33	C	34	B	35	B
36	B	37	Not Given	38	FALSE
39	TRUE	40	Not Given		

Reading Test 14

Section 1					
1	need	2	(the) ashes	3	(vegetable) cassava
4	houses	5	C	6	B
7	A	8	A	9	TRUE
10	Not Given	11	TRUE	12	TRUE
13	B				
Section 2					
14	iii	15	i	16	v
17	iv	18	ii	19	vi
20	D	21	C	22	A
23	B	24	B	25	A
26	D				
Section 3					
27	B	28	A	29	D
30	C	32	J	32	F
33	K	34	K	35	D
36	ailes	37	experiments	38	loyalty card
39	cosmetics	40	group		

Reading Test 15

Section 1					
1	vi	2	v	3	ix
4	iv	5	viii	6	iii
7	vii	8	Not Given	9	TRUE
10	FALSE	11	FALSE	12	Not Given
13	TRUE				
Section 2					
14	iii	15	i	16	ii
17	vi	18	v	19	iv
20	B	21	D	22	C
23	B	24	D	25	B
26	C				
Section 3					
27	A	28	C	29	B
30	D	32	B	32	Yes
33	Not Given	34	Not Given	35	No
36	word choices	37	colloquail terminilogy	38	observer
39	invariant description	40	(theory of) general relativity		

Reading Test 16

Section 1					
1	D	2	B	3	G
4	A	5	F	6	E
7	Mississippi	8	London	9	The Netherlands
10	Berlin	11	Los Angeles/ LA	12	B
13	D				
Section 2					
14	i	15	D	16	B
17	G	18	F	19	TRUE
20	FALSE	21	TRUE	22	Not Given
23	FALSE	24	Fighting	25	commerce
26	estates	27	flower lovers		
Section 3					
28	D	29	C	30	C
31	A	33	Yes	33	Not Given
34	No	35	Not Given	36	B
37	E	38	A	39	D
40	C				

Reading Test 17

Section 1					
1	No	2	Yes	3	No
4	No	5	Not Given	6	D
7	C	8	D	9	A
10	D	11	B	12	B
13	A				
Section 2					
14	B	15	C	16	A
17	C	18	B	19	C
20	D	21	A	22	TRUE
23	Not Given	24	TRUE	25	FALSE
26	FALSE				
Section 3					
27	v	28	ii	29	iii
30	viii	32	Not Given	32	TRUE
33	FALSE	34	FALSE	35	Not Given
36	TRUE	37	growing population	38	racist assumption
39	archeological and historical	40	inhuman behavior		

Reading Test 18

Section 1					
1	D	2	G	3	B
4	A	5	F	6	short
7	complex, non-repetitive	8	rats	9	TRUE
10	FALSE	11	FALSE	12	Not Given
13	TRUE				
Section 2					
14	A	15	D	16	E
17	G	18	winds	19	(the) pedestrians
20	horizontal forces	21	(excessive dynamic) vibration	22	motion
23	Imperial College	24	normal forward walking	25	(the) Arup engineers
26	(the) design assumptions				
Section 3					
27	B	28	C	29	A
30	A	32	Yes	32	Not Given
33	No	34	Not Given	35	Yes
36	No	37	F	38	B
39	A	40	D		

Reading Test 19

Section 1					
1	FALSE	2	TRUE	3	Not Given
4	TRUE	5	FALSE	6	TRUE
7	Not Given	8	E	9	C
10	A	11	D	12	F
13	A				
Section 2					
14	stories	15	America	16	folklore
17	fairy-stories	18	adventure	19	C
20	A	21	E	22	FALSE
23	TRUE	24	Not Given	25	TRUE
26	TRUE				
Section 3					
27	B	28	L	29	A
30	C	32	F	32	D
33	C	34	A	35	B
36	TRUE	37	FALSE	38	TRUE
39	FALSE	40	Not Given		

Reading Test 20

Section 1					
1	FALSE	2	TRUE	3	Not Given
4	TRUE	5	FALSE	6	TRUE
7	Not Given	8	E	9	C
10	A	11	D	12	F
13	A				
Section 2					
14	stories	15	America	16	folklore
17	fairy-stories	18	adventure	19	C
20	A	21	E	22	FALSE
23	TRUE	24	Not Given	25	TRUE
26	TRUE				
Section 3					
27	B	28	L	29	A
30	C	32	F	32	D
33	C	34	A	35	B
36	TRUE	37	FALSE	38	TRUE
39	FALSE	40	Not Given		

Reading Test 21

Section 1					
1	vi	2	v	3	ix
4	iv	5	viii	6	iii
7	vii	8	Not Given	9	TRUE
10	FALSE	11	FALSE	12	Not Given
13	TRUE				
Section 2					
14	clay	15	water	16	straw
17	cow manure	18	950 degress	19	60 minutes
20	FALSE	21	TRUE	22	Not Given
23	Not Given	24	C	25	D
26	A				
Section 3					
27	vi	28	iv	29	ii
30	vi	32	vii	32	F
33	B	34	E	35	D
36	G	37	A	38	C
39	B	40	C		

Reading Test 22

Section 1					
1	Yes	2	No	3	No
4	Not Given	5	Yes	6	Not Given
7	No	8	rock	9	teeth
10	descendants	11	canoes	12	trade winds
13	seabirds and turtles				
Section 2					
14	TRUE	15	FALSE	16	TRUE
17	Not Given	18	TRUE	19	Not Given
20	1976 and 1995	21	2000 floods	22	France
23	1856	24	1988 and 2002	25	1990
26	500	27	D		
Section 3					
28	FALSE	29	FALSE	30	TRUE
31	Not Given	32	FALSE	33	Not Given
34	TRUE	35	history of childhood	36	(as) miniature adults
37	(with the) industrialization	38	The factory Act	39	play and education
40	classroom				

Reading Test 23

Section 1					
1	A	2	C	3	B
4	D	5	Yes	6	No
7	No	8	Yes	9	Not Given
10	Not Given	11	G	12	A
13	B	14	E		
Section 2					
15	indentical	16	balls of paper	17	Count/ caculate eggs
18	fruits flies	19	mosquitofish	20	surface area
21	sugar water	22	TRUE	23	FALSE
24	Not Given	25	TRUE	26	Not Given
27	TRUE				
Section 3					
28	hammer	29	body	30	pad
31	cavities/ sinus cavities	32	trunks and feet	33	infrasonic
34	ecology	35	seismic messages	36	acoustic communication/ communications
37	mate	38	ground	39	A
40	C				

Reading Test 24

Section 1					
1	C	2	A	3	D
4	B	5	A	6	A
7	beaks	8	vomiting	9	harderns
10	TRUE	11	Not Given	12	FALSE
13	Not Give				
Section 2					
14	E	15	B	16	E
17	F	18	A	19	birch trees
20	Russian rivers	21	pumps	22	cables
23	volcanic explosions	24	C	25	D
26	A				
Section 3					
27	Yes	28	Not Given	29	No
30	No	31	Yes	32	controverial
33	tapped/ (new)	34	expensive	35	competitive
36	E	37	D	38	B
39	A	40	C		

Reading Test 25

Section 1					
1	Not Given	2	TRUE	3	FALSE
4	TRUE	5	mason	6	holes
7	metal/ iron wedges	8	split	9	bricks
10	heating	11	C	12	E
13	F				
Section 2					
14	A	15	B	16	A
17	C	18	C	19	D
20	B	21	C	22	C
23	create a story	24	brain scans	25	olfactory cortex
26	spice				
Section 3					
27	E	28	A	29	C
30	G	31	F	32	specific person
33	three cards/ 3 cards	34	mental walk	35	loci method
36	education	37	A	38	D
39	B	40	E		

Reading Test 26

Section 1					
1	E	2	A	3	D
4	B	5	C	6	B
7	F	8	G	9	migrated
10	withering skin	11	(tectonic) plates	12	dispersalism
13	vicarisanism				
Section 2					
14	F	15	C	16	A
17	G	18	F	19	TRUE
20	FALSE	21	FALSE	22	TRUE
23	TRUE	24	TRUE	25	FALSE
26	Not Given				
Section 3					
27	sound laws	28	fashion	29	imperfect
30	principle of ease	31	FALSE	32	Not Given
33	Not Given	34	TRUE	35	TRUE
36	Not Given	37	TRUE	38	C
39	B	40	A		

Reading Test 27

Section 1					
1	C	2	A	3	B
4	B	5	customers	6	public relation skills
7	museology/ (the new) museology	8	tourist attractions	9	A
10	D	11	B	12	C
13	E				
Section 2					
14	A	15	D	16	B
17	D	18	C	19	B
20	D	21	A	22	workplace injury
23	16.6 weeks	24	7%	25	golf
26	massage	27	workloads		
Section 3					
28	F	29	C	30	G
31	B	32	F	33	E
34	Not Given	35	Not Given	36	FALSE
37	TRUE	38	C	39	A
40	D				

Reading Test 28

Section 1					
1	ix	2	x	3	i
4	vii	5	iii	6	viii
7	vi	8	I	9	D
10	B	11	H	12	E
13	A				
Section 2					
14	D	15	C	16	A
17	D	18	B	19	A
20	B	21	C	22	heat
23	denser	24	Great ocean Conveyor	25	freshwater
26	southward				
Section 3					
27	iv	28	xii	29	ii
30	x	31	i	32	ix
33	v	34	vii	35	C
36	B	37	A	38	Yuri Larin
39	Colour-coding/ colour	40	family		

Reading Test 29

Section 1					
1	iv	2	vii	3	x
4	i	5	vi	6	ii
7	viii	8	privacy	9	male prison
10	personal space	11	attraction/ attraction levels	12	help
13	control				
Section 2					
14	vi	15	viii	16	v
17	iii	18	ix	19	vii
20	ii	21	D	22	B
23	C	24	density	25	architects
26	budget	27	garden		
Section 3					
28	D	29	C	30	B
31	D	32	Not Given	33	FALSE
34	Not Given	35	TRUE	36	C
37	D	38	B	39	E
40	A				

Reading Test 30

Section 1					
1	TRUE	2	TRUE	3	FALSE
4	Not Given	5	TRUE	6	D
7	B	8	A	9	B
10	C	11	A	12	B
13	C				
Section 2					
14	B	15	A	16	A
17	C	18	B	19	A
20	F	21	H	22	C
23	J	24	G	25	A
26	C				
Section 3					
27	v	28	x	29	iii
30	i	31	vii	32	viii
33	ii	34	C	35	B
36	E	37	A	38	D
39	C	40	D		

Reading Test 31

Section 1					
1	iii	2	x	3	viii
4	ix	5	vi	6	i
7	iv	8	extra snacks	9	firewood
10	85%	11	50%	12	A
13	C				
Section 2					
14	ii	15	v	16	i
17	viii	18	vi	19	iii
20	iv	21	1950s	22	(being) shy/shyness
23	starvation	24	(native) fish	25	patnership project/ network (of sites)/ partnership project network
26	Otter and brown-hare	27	B		
Section 3					
28	i	29	ix	30	iv
31	vii	32	v	33	iii
34	A	35	B	36	F
37	D	38	B	39	C
40	E				

Reading Test 32

Section 1					
1	Not Given	2	Not Given	3	FALSE
4	TRUE	5	TRUE	6	FALSE
7	100 English words	8	chimpanzees	9	avian cognition
10	particularly chosen	11	color	12	wrong pronunciation
13	teenager				
Section 2					
14	E	15	D	16	C
17	B	18	G	19	C
20	F	21	E	22	D
23	A	24	Chickens	25	AD-36
26	Gene	27	vaccine		
Section 3					
28	Yes	29	No	30	Yes
31	Not Given	32	No	33	Yes
34	C	35	A	36	B
37	D	38	A	39	C
40	E				

Reading Test 33

Section 1					
1	85 dBA	2	hearing (impairement)	3	high-frequenncy
4	stomach (contractions)	5	noise map	6	B
7	D	8	C	9	E
10	A	11	C	12	D
13	C				
Section 2					
14	D	15	G	16	B
17	E	18	C	19	B
20	B/D	21	B/D	22	B/D
23	D/B	24	social history	25	tag
26	protective equiment	27	(lower pressure) water		
Section 3					
28	iv	29	ix	30	i
31	v	32	iii	33	vii
34	Horace Walpole	35	fairy tale	36	Sri Lanka
37	A	38	C	39	B
40	B				

Reading Test 34

1	I	2	C	3	D
4	A	5	B	6	A
7	D	8	energy	9	stratification
10	(bands of) bark	11	(dry moutain) air	12	ground cover
13	distance				
Section 2					
14	G	15	A	16	C
17	B	18	H	19	D
20	C	21	A	22	B
23	fruit	24	plant toxins/toxin	25	reproduction/ reproduce
26	water	27	drought		
Section 3					
28	C	29	D	30	F
31	G	32	D	33	F
34	C	35	G	36	B
37	A	38	C	39	E
40	A				